

<110> Barash et al.

<120> Signal Transduction Pathway Component Polynucleotides, Polypeptides, Antibodies, and Methods Based Thereon

<130> PT086P1

<140> unassigned

<141> 2001-09-20

<150> 60/234,997

<151> 2000-09-25

<160> 139

<170> PatentIn Ver. 2.0

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<212> DNA

<213> Homo sapiens

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095599-09201

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<223> n equals a,t,g, or c
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<210> 13
<211> 501
<212> DNA
<213> Homo sapiens
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<212> DNA
<213> Homo sapiens
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 <223> n equals a,t,g, or c

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<211> 719
<212> DNA
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<221> SITE



<222> (1317)  
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 <213> Homo sapiens

<220>  
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 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE

<222> (2440)  
 <223> n equals a,t,g, or c

<400> 22

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 <212> DNA  
 <213> Homo sapiens

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<220>  
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 <223> n equals a,t,g, or c

<220>  
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 <223> n equals a,t,g, or c

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<212> DNA
<213> Homo sapiens
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<211> 946
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
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<223> n equals a,t,g, or c
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<211> 1569
<212> DNA
<213> Homo sapiens

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 $\langle 220 \rangle$

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<220>  
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 <222> (1565)  
 <223> n equals a,t,g, or c

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 <211> 797  
 <212> DNA  
 <213> Homo sapiens

<220>  
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<220>  
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 <222> (750)  
 <223> n equals a,t,g, or c

<220>  
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 <223> n equals a,t,g, or c

<220>  
 <221> SITE

&lt;222&gt; (792)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 27

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&lt;211&gt; 911

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (874)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (896)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (909)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (910)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (911)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 28

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911

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<222> (730)
<223> n equals a,t,g, or c
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<220>  
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 <222> (746)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (791)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (825)  
 <223> n equals a,t,g, or c

<400> 30  
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 <211> 567  
 <212> DNA  
 <213> Homo sapiens

<220>  
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 <222> (236)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (238)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (542)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (556)  
 <223> n equals a,t,g, or c

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 gtgcatgtaa agaagtatct ttgcctgctg tataactgtg tgtatctcat tttcctcaca 180  
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<210> 32  
 <211> 957  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (780)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (821)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (893)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (899)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (952)  
 <223> n equals a,t,g, or c

<400> 32						
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gactgcttgt	cttgaccctg	ccctccaccc	tccccagagc	cacttcgggt	gcgcgctctt	180
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<210> 33  
 <211> 1070  
 <212> DNA  
 <213> Homo sapiens

<220>  
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 <222> (968)  
 <223> n equals a,t,g, or c

<400> 33						60
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atgatgaagt	tccgtgagga	ccgcagcctc	ctgggcctgg	gcctgccctc	aggtggcttc	300
cacgatcgct	acttcacact	caacagcagc	tgcttgccgg	tctacaagga	ggtccggagt	360
caccggcctg	agaaggagtg	gcctattaag	agtctcaaag	tctacctggg	agtgaagaag	420
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<210> 34  
 <211> 402  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (94)  
 <223> n equals a,t,g, or c

<400> 34						
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cataagcagg	acagctcggg	gctccgtctc	tggaaacgcc	gctgggttcgt	cctctccggc	240
cattgcctct	tttattacaa	ggacagccgc	gagagagtgt	cctaggcagc	gtcctgctcc	300
ccagctacaa	tattagacca	gatgggcccg	gagcccccca	gggagtccgc	ttcaccttca	360
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<210> 35  
 <211> 353  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (220)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (334)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (347)  
 <223> n equals a,t,g, or c

<400> 35						
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gaagaacttc	tccctcgaac	tttaaagtcc	gcttctttgt	gttaacaaaa	gccagcctgg	180
catactttga	agatcgctcat	gggaagaagc	gcacgctgan	aggggtccat	tgagctctcc	240
cgaatcaaat	gtgttgagrt	tgtgaaaagt	gacatcagca	tcccatgcc	ctataaatac	300
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<210>	38
<211>	494
<212>	DNA

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<220>
<221> SITE
<222> (891)
<223> n equals a,t,g, or c
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<210> 41
<211> 974
<212> DNA
<213> Homo sapiens
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<210>	42
<211>	569
<212>	DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (179)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (538)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (550)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (553)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (564)

<223> n equals a,t,g, or c

<400> 42

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caggagtggg	tcaagaacat	tcgagaagtg	attcaagaaa	ggatcattca	cctgaaagna	180
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gacttgtccc	tggcagctca	mcgggttttag	ccgtggcaac	gtttgggacc	tccaacaag	480
gactccaaat	caaccaacct	ctcctttgaa	gaactttctc	ctgggaaagg	gcttggtngt	540
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<210> 43

<211> 2978

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (28)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (2947)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (2973)

<223> n equals a,t,g, or c

<400> 43

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<210> 44  
 <211> 883  
 <212> DNA  
 <213> Homo sapiens

<400> 44						
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<210> 45  
 <211> 3154  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (2365)  
 <223> n equals a,t,g, or c

<400> 45	ggatggccat	ggagaagagc	aaggccacgc	cgcccgcgcg	cgccagcaag	aagatmctgc	60
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<210> 46
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<212> DNA
<213> Homo sapiens

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<220>
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<222> (2902)
<223> n equals a,t,g, or c

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<220>
<221> SITE
<222> (2909)
<223> n equals a,t,g, or c

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aaaaaaaaaa	aaaaaaaaaa	anggggggn				2909

<210> 47  
 <211> 477  
 <212> DNA  
 <213> Homo sapiens

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<210> 48  
 <211> 1768  
 <212> DNA  
 <213> Homo sapiens

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<210> 49  
 <211> 833  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE

<222> (420)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (827)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (828)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (833)  
<223> n equals a,t,g, or c

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<210> 50  
<211> 597  
<212> DNA  
<213> Homo sapiens

<400> 50  
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<210> 51  
<211> 1445  
<212> DNA  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (1441)  
<223> n equals a,t,g, or c

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<210> 52  
 <211> 395  
 <212> DNA  
 <213> Homo sapiens

<400> 52						
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<210> 53  
 <211> 2073  
 <212> DNA  
 <213> Homo sapiens

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 <221> SITE  
 <222> (2041)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (2050)  
 <223> n equals a,t,g, or c

<400> 53						
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taccatcaaa	gaaagaaaac	cgaatgtgtt	ttcttttttt	acttggtcta	acttggtagt	180
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cggctatttcg	gtcgtgcccc	gaagttcctc	aacaaacctc	ggtcaggtag	tgtggagctc	480
ccaaagccat	ccctctgtca	cagaaacagc	aacggcctct	agcaccagaa	aacaggggag	540
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gatctattcg	ctaccgggac	tcttcaggc	tcccgagagg	agtcgggacc	cttcggcttg	660
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<210> 54  
 <211> 429  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (366)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (397)  
 <223> n equals a,t,g, or c

<220>  
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 <222> (409)  
 <223> n equals a,t,g, or c

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agaacttctt	ggatctgatt	tcgtcctcgg	ggagaagaga	ccccagaggt	gttgagcagc	180
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agcaaagggg	accagcctct	ctacagcatt	cccacgcagg	aacatcctgg	gcagtggagg	360
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<210> 55  
 <211> 467  
 <212> DNA  
 <213> Homo sapiens

<400> 55						
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<210> 56
<211> 2022
<212> DNA
<213> Homo sapiens
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```
<210> 57
<211> 1558
<212> DNA
<213> Homo sapiens
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aaggcccagg	ggtccggcca	cccaggcggg	gcagctccgt	aataaataat	ggagttgggg		180
gcagggggtc	agggctgtct	ctgcttcttc	ttgactgaaa	tccgcttctt	tctcgctgcc		240
agcatctcat	agaaggggtc	cacactcaca	gccgcctgga	tggacttgat	ccactcgtcc		300
ttctctctct	gcgtgggggc	cgagatccgg	tacaccatgt	ggtttccctc	caccactcgg		360
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tcaaagcagt	tccggtttccg	ggggtcgtcc	acctctcgga	tgtctagatt	ctccaggggg		480
atgatctctc	ggggctctct	gtccgtggtg	tactcaaaagt	agtagaggca	gttgtctgtg		540
aggataaacc	agcgcgcgtt	ccacgtcttc	accgcgcccc	ctccagctt	caggagccag		600

ccctcccggt	ccgggttgaa	gaaggtgtgg	gtcaggtcat	tcccgtcatc	ctcaggaatc	660
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gtgtctgtgg	actggaaaac	cccagggttg	cacaggcagt	atcgctgggc	gaaggcctcc	900
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<210> 58  
 <211> 421  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (368)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (370)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (397)  
 <223> n equals a,t,g, or c

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cgccagcaga	agggaaattg	tgaaagcgac	ctgctgtaga	aaaggcggcc	cacagccacc	180
tcagcatgca	gaggaggccc	agctgctgag	aggagttgcc	tgagagtkac	ctttgcatct	240
gcctgtccag	ccagcatgga	accaaagcgg	atcagagagg	gctaccttgt	gaagaagggg	300
agcgtgttca	atacgtggaa	acccatgtgg	gttgtattgt	tagaagatgg	rattgaattc	360
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a						421

<210> 59  
 <211> 2122  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (326)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (428)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE



<222> (606)  
 <223> n equals a,t,g, or c

<220>  
 <221> SITE  
 <222> (1230)  
 <223> n equals a,t,g, or c

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 accaaagcga gactggacac tstgtgccta gagccccctc tgcagctggc ctttcctcct 180  
 gggacccac ttatcctcac ttcgttttct ttttcttccc tgcctggctc ccggcaggsc 240  
 cccggagcag cagtgggcga ggaaaatttg tcacagcagc cagaggggtt taacaggagt 300  
 gcagagggat aagggcagct tctgcntctg cccaagagct ggccacctct ttaaagactg 360  
 agggaaacagt gggaggaggga actgtgggac agtgtggtac ctatctgtcc cccctctgga 420  
 ggggktgnac aagggaaaagg gcaccksggg gcacagagat gcaggacaga ttgcacatcc 480  
 tggaggacct gaatatgctc tacattcggc agatggcact cagcgacctg cccgaggaca 540  
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 gctccctggg ccgctcctca gggaggcgctg tccgggcata gctggacagt gctgggggtt 1140  
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 ctgtcaacaa ggagactcga gtccgggcag gggagctgga ccaggctcta ggacggccct 1560  
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 attggaagaa tgaaaaaaaa aa 2122

<210> 60  
 <211> 167  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (154)  
 <223> n equals a,t,g, or c

<400> 60  
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 aaaaaaacaa ctggatggca gcccttattt ctcttcatta tcgtagtact ctagatcgaa 120  
 tgttagattc agtattattg aaagaagaaa atgnagcaac cactgag 167

<210> 61  
 <211> 857  
 <212> DNA

$\langle 220 \rangle$

$$\begin{aligned} \langle 210 \rangle & 63 \\ \langle 211 \rangle & 963 \end{aligned}$$

<400>	64															
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Pro	Glu	Arg	Lys	Leu	Gln	Arg	Tyr	Ala	Trp	Arg	Lys	Arg	Trp	Phe	Val	
			20					25					30			
Leu	Arg	Arg	Gly	Arg	Met	Ser	Gly	Asn	Pro	Asp	Val	Leu	Glu	Tyr	Tyr	
			35				40					45				
Arg	Asn	Lys	His	Ser	Ser	Lys	Pro	Ile	Arg	Val	Ile	Asp	Leu	Ser	Glu	
	50					55					60					
Cys	Ala	Val	Trp	Lys	His	Val	Gly	Pro	Ser	Phe	Val	Arg	Lys	Glu	Phe	
65					70					75					80	
Gln	Asn	Asn	Phe	Val	Phe	Ile	Val	Lys	Thr	Thr	Ser	Arg	Thr	Phe	Tyr	
				85					90					95		
Leu	Val	Ala	Lys	Thr	Glu	Gln	Glu	Met	Gln	Val	Trp	Val	His	Ser	Ile	
			100					105					110			
Ser	Gln	Val	Cys	Asn	Leu	Gly	His	Leu	Glu	Asp	Gly	Ala	Asp	Ser	Met	
		115					120					125				
Glu	Ser	Leu	Ser	Tyr	Thr	Pro	Ser	Ser	Leu	Gln	Pro	Ser	Ser	Ala	Ser	
	130					135					140					





Phe Asn Ser Gly Arg Cys Leu Arg Gly Val Gly Arg Asp Thr Leu Ser  
 195 200 205  
 Met Ala Ile His Glu Val Tyr Gln Glu Leu Ile Gln Asp Val Leu Lys  
 210 215 220  
 Gln Gly Tyr Leu Trp Lys Arg Gly His Leu Arg Arg Asn Trp Ala Glu  
 225 230 235 240  
 Arg Trp Phe Gln Leu Gln Pro Ser Cys Leu Cys Tyr Phe Gly Ser Glu  
 245 250 255  
 Glu Cys Lys Glu Lys Arg Gly Ile Ile Pro Leu Asp Ala His Cys Cys  
 260 265 270  
 Val Glu Val Leu Pro Asp Arg Asp Gly Lys Arg Cys Met Phe Cys Val  
 275 280 285  
 Lys Thr Ala Xaa Arg Thr Tyr Glu Met Ser Ala Ser Asp Thr Arg Gln  
 290 295 300  
 Arg Gln Glu Trp Thr Ala Ala Ile Gln Met Ala Ile Arg Leu Gln Ala  
 305 310 315 320  
 Glu Gly Lys Thr Ser Leu His Lys Asp Leu Lys Gln Lys Arg Arg Glu  
 325 330 335  
 Gln Arg Glu Gln Arg Glu Arg Arg Arg Ala Ala Arg Lys Arg Ser Cys  
 340 345 350  
 Cys Gly Cys Ser Ser Cys Arg Arg Arg Arg Ser Gly Ser Cys Arg Ser  
 355 360 365  
 Trp Ser Cys Cys Arg Arg Arg Thr Ala Gly Arg Ala Ala Ala Ala Gly  
 370 375 380  
 Gly Gly Gly Thr Ala Pro Gln Pro Ala Pro Arg Ala Ala Ala Gly Ala  
 385 390 395 400  
 Arg Gly Pro Thr Ala Arg Gly Gly Ala Gly Pro Gly Leu His Ala Gly  
 405 410 415

<210> 66  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (141)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (162)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (163)  
 <223> Xaa equals any of the naturally occurring L-amino acids

100250" 6655660

&lt;400&gt; 66

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 Gly Lys Lys Thr Arg His Gln Trp Pro Ser Glu Glu Ala Ser Met Asp  
 20 25 30  
 Leu Val Lys Asp Ala Lys Ile Cys Ala Phe Leu Leu Arg Lys Lys Arg  
 35 40 45  
 Phe Gly Gln Trp Thr Lys Leu Leu Cys Val Ile Lys Asp Thr Lys Leu  
 50 55 60  
 Leu Cys Tyr Lys Ser Ser Lys Asp Gln Gln Pro Gln Met Glu Leu Pro  
 65 70 75 80  
 Leu Gln Gly Cys Asn Ile Thr Tyr Ile Pro Lys Asp Ser Lys Lys Lys  
 85 90 95  
 Lys His Glu Leu Lys Ile Thr Gln Gln Gly Thr Asp Pro Leu Val Leu  
 100 105 110  
 Ala Val Gln Ser Lys Glu Gln Ala Glu Gln Trp Leu Lys Val Ile Lys  
 115 120 125  
 Glu Ala Tyr Ser Gly Cys Ser Gly Pro Val Asp Ser Xaa Cys Pro Pro  
 130 135 140  
 Pro Pro Ser Ser Pro Val His Lys Ala Glu Leu Glu Lys Asn Cys Leu  
 145 150 155 160  
 Arg Xaa Xaa Gln Leu Lys  
 165

&lt;210&gt; 67

&lt;211&gt; 446

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (381)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (392)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (405)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 67

Ser Thr Leu Phe Gln Pro Tyr Ile Glu Glu Ile Cys Glu Ser Leu Arg  
 1 5 10 15  
 Gly Asp Ile Phe Gln Lys Phe Met Glu Ser Asp Lys Phe Thr Arg Phe  
 20 25 30  
 Cys Gln Trp Lys Asn Val Glu Leu Asn Ile His Leu Thr Met Asn Glu  
 35 40 45  
 Phe Ser Val His Arg Ile Ile Gly Arg Gly Gly Phe Gly Glu Val Tyr

T00250" 6655660



50					55					60					
Gly 65	Cys	Arg	Lys	Ala	Asp 70	Thr	Gly	Lys	Met	Tyr 75	Ala	Met	Lys	Cys	Leu 80
Asp	Lys	Lys	Arg	Ile 85	Lys	Met	Lys	Gln	Gly 90	Glu	Thr	Leu	Ala	Leu 95	Asn
Glu	Arg	Ile	Met 100	Leu	Ser	Leu	Val	Ser 105	Thr	Gly	Asp	Cys	Pro 110	Phe	Ile
Val	Cys	Met 115	Thr	Tyr	Ala	Phe	His 120	Thr	Pro	Asp	Lys	Leu 125	Cys	Phe	Ile
Leu	Asp 130	Leu	Met	Asn	Gly	Gly 135	Asp	Leu	His	Tyr	His 140	Leu	Ser	Gln	His
Gly 145	Val	Phe	Ser	Glu	Lys 150	Glu	Met	Arg	Phe	Tyr 155	Ala	Thr	Glu	Ile 160	Ile
Leu	Gly	Leu	Glu	His 165	Met	His	Asn	Arg	Phe 170	Val	Val	Tyr	Arg	Asp 175	Leu
Lys	Pro	Ala	Asn 180	Ile	Leu	Leu	Asp	Glu 185	His	Gly	His	Ala	Arg 190	Ile	Ser
Asp	Leu	Gly 195	Leu	Ala	Cys	Asp	Phe 200	Ser	Lys	Lys	Lys	Pro 205	His	Ala	Ser
Val	Gly 210	Thr	His	Gly	Tyr	Met 215	Ala	Pro	Glu	Val	Leu 220	Gln	Lys	Gly	Thr
Ala 225	Tyr	Asp	Ser	Ser	Ala 230	Asp	Trp	Phe	Ser	Leu 235	Gly	Cys	Met	Leu	Phe 240
Lys	Leu	Leu	Arg	Gly 245	His	Ser	Pro	Phe	Arg 250	Gln	His	Lys	Thr	Lys 255	Asp
Lys	His	Glu	Ile 260	Asp	Arg	Met	Thr	Leu 265	Thr	Val	Asn	Val	Glu 270	Leu	Pro
Asp	Thr	Phe 275	Ser	Pro	Glu	Leu	Lys 280	Ser	Leu	Leu	Glu	Gly 285	Leu	Leu	Gln
Arg	Asp 290	Val	Ser	Lys	Arg	Leu 295	Gly	Cys	His	Gly 300	Gly	Gly	Ser	Gln	Glu
Val 305	Lys	Glu	His	Ser	Phe 310	Phe	Lys	Gly	Val	Asp 315	Trp	Gln	His	Val	Tyr 320
Leu	Gln	Lys	Tyr	Pro 325	Pro	Pro	Leu	Ile	Pro 330	Pro	Arg	Gly	Glu	Val 335	Asn
Ala	Ala	Asp	Ala 340	Phe	Asp	Ile	Gly	Ser 345	Phe	Asp	Glu	Glu	Asp 350	Thr	Lys
Gly	Ile	Lys 355	Leu	Leu	Asp	Cys	Asp 360	Gln	Glu	Leu	Tyr	Lys 365	Asn	Phe	Pro
Leu 370	Val	Ile	Ser	Glu	Arg	Trp 375	Gln	Gln	Glu	Val	Thr 380	Xaa	Thr	Val	Tyr
Glu 385	Ala	Val	Asn	Ala	Asp 390	Thr	Xaa	Lys	Ile	Glu 395	Ala	Arg	Lys	Arg	Ala 400
Lys	Asn	Lys	Gln	Xaa	Gly	His	Glu	Glu	Asp	Tyr	Ala	Leu	Gly	Lys	Asp

005599-09204

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<210> 68
<211> 244
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (190)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (195)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 68
Ser Xaa Asp Lys Val Pro Pro Asp Ser Ala Leu Glu Ser Pro Phe Glu
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Glu Met Ala Leu Val Arg Gly Gly Trp Leu Trp Arg Gln Ser Ser Ile
          20          25          30
Leu Arg Arg Trp Lys Arg Asn Trp Phe Ala Leu Trp Leu Asp Gly Thr
          35          40          45
Leu Gly Tyr Tyr His Asp Glu Thr Ala Gln Asp Glu Glu Asp Arg Val
          50          55          60
Leu Ile His Phe Asn Val Arg Asp Ile Lys Ile Gly Pro Glu Cys His
          65          70          75          80
Asp Val Gln Pro Pro Glu Gly Arg Ser Arg Asp Gly Leu Leu Thr Val
          85          90          95
Asn Leu Arg Glu Gly Gly Arg Leu His Leu Cys Ala Glu Thr Lys Asp
          100          105          110
Asp Ala Leu Ala Trp Lys Thr Ala Leu Leu Glu Ala Asn Ser Thr Pro
          115          120          125
Val Arg Val Tyr Ser Pro Tyr Gln Asp Tyr Tyr Glu Val Val Pro Pro
          130          135          140
Asn Ala His Glu Ala Thr Tyr Val Arg Ser Tyr Tyr Gly Pro Pro Tyr
          145          150          155          160
Ala Gly Pro Gly Val Thr His Val Ile Val Arg Glu Asp Pro Cys Tyr
          165          170          175
Ser Ala Gly Ala Pro Leu Ala Met Gly Met Leu Ala Gly Xaa Pro Leu
          180          185          190

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35							40				45				
Ala	His 50	Lys	Glu	Leu	Glu	Met 55	Val	Val	Lys	Ala	Cys 60	Asn	Glu	Gly	Val
Arg 65	Lys	Met	Ser	Arg	Thr 70	Glu	Gln	Met	Ile	Ser 75	Ile	Gln	Lys	Lys	Met 80
Xaa	Phe	Lys	Ile	Xaa 85	Ser	Val	Pro	Ile	Ile 90	Ser	His	Ser	Arg	Trp 95	Leu
Leu	Lys	Gln	Gly 100	Glu	Leu	Gln	Gln	Xaa 105	Xaa	Gly	Pro	Lys	Thr 110	Ser	Arg
Thr	Leu	Arg 115	Thr	Lys	Lys	Leu	Phe 120	His	Glu	Ile	Tyr	Leu 125	Phe	Leu	Phe
Asn	Asp 130	Leu	Leu	Val	Ile	Cys 135	Arg	Gln	Ile	Pro	Gly 140	Asp	Lys	Tyr	Gln
Val 145	Phe	Asp	Ser	Ala	Pro 150	Arg	Gly	Leu	Leu	Arg 155	Val	Glu	Glu	Leu	Glu 160
Asp	Gln	Gly	Gln	Thr 165	Leu	Ala	Asn	Val	Phe 170	Ile	Leu	Arg	Leu	Leu 175	Glu
Asn	Ala	Xaa	Asp 180	Arg	Glu	Ala	Thr	Tyr 185	Met	Leu	Lys	Ala	Ser 190	Ser	Gln
Ser	Glu	Met 195	Lys	Arg	Trp	Met	Thr 200	Ser	Leu	Ala	Pro	Asn 205	Arg	Arg	Thr
Lys	Phe 210	Val	Ser	Phe	Thr	Ser 215	Arg	Leu	Leu	Asp	Cys 220	Pro	Gln	Val	Gln
Cys 225	Val	His	Pro	Tyr	Val 230	Ala	Gln	Gln	Pro	Asp 235	Glu	Leu	Thr	Leu	Glu 240
Leu	Ala	Asp	Ile	Leu 245	Asn	Ile	Leu	Asp	Lys 250	Thr	Asp	Asp	Gly	Trp 255	Ile
Phe	Gly	Glu	Arg 260	Leu	His	Asp	Gln	Glu 265	Arg	Gly	Trp	Phe	Pro 270	Ser	Ser
Met	Thr	Glu 275	Glu	Ile	Leu	Asn	Pro 280	Lys	Ile	Arg	Ser	Gln 285	Asn	Leu	Lys
Glu	Cys 290	Phe	Arg	Val	His	Lys 295	Met	Asp	Asp	Pro	Gln 300	Arg	Ser	Arg	Thr
Arg 305	Thr	Ala	Xaa	Ser	Trp 310	Ala	Ala	Gly	Ile	Gly 315	Asn	Asp	Pro	His	Pro 320
Gly	Gly	Gln	Arg	Glu 325	Gln	Gly	Leu	His	Glu 330	Thr	Pro	Thr	Glu	Gly 335	Gly
Gly	Gly	Ala	Leu 340	Gly	Ser	Thr	Gly	Gln 345	His	Leu	Pro	Arg	Trp 350	Gln	Asp
Leu	Ala	Trp 355	Gly	Ala	Arg	Pro	Ser 360	Ser	Leu	Pro	Thr	His 365	Xaa	Cys	Ser
Cys 370	Val	Leu	Ala	Pro	Cys	Xaa 375	Gln	Thr	Gly						

<210> 70  
 <211> 205  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (20)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (39)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 70  
 Ala Arg Ala Ala Trp Pro Gly Val Asp Ala Val Ala Glu Pro Arg Gly  
   1                  5                  10                  15  
 Ala Gly Arg Xaa Trp Arg Thr Ala Gly Pro Arg Arg Thr Arg Met Glu  
                   20                  25                  30  
 Glu Glu Gly Val Lys Glu Xaa Gly Glu Lys Pro Arg Gly Ala Gln Met  
                   35                  40                  45  
 Val Asp Lys Ala Gly Trp Ile Lys Lys Ser Ser Gly Gly Leu Leu Gly  
           50                  55                  60  
 Phe Trp Lys Asp Arg Tyr Leu Leu Leu Cys Gln Ala Gln Leu Leu Val  
   65                  70                  75                  80  
 Tyr Glu Asn Glu Asp Asp Gln Lys Cys Val Glu Thr Val Glu Leu Gly  
                   85                  90                  95  
 Ser Tyr Glu Lys Cys Gln Asp Leu Arg Ala Leu Leu Lys Arg Lys His  
                   100                  105                  110  
 Arg Phe Ile Leu Leu Arg Ser Pro Gly Asn Lys Val Ser Asp Ile Lys  
           115                  120                  125  
 Phe Gln Ala Pro Thr Gly Glu Glu Lys Glu Ser Trp Ile Lys Ala Leu  
   130                  135                  140  
 Asn Glu Gly Ile Asn Arg Gly Lys Asn Lys Ala Phe Asp Glu Val Lys  
  145                  150                  155                  160  
 Val Asp Lys Ser Cys Ala Leu Glu His Val Thr Arg Asp Arg Val Arg  
                   165                  170                  175  
 Gly Gly Gln Arg Arg Arg Pro Pro Thr Arg Val His Leu Lys Glu Val  
                   180                  185                  190  
 Ala Ser Ala Ala Ser Asp Gly Leu Leu Arg Leu Gly Ser  
   195                  200                  205

<210> 71  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

<220>  
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 <222> (101)  
 <223> Xaa equals any of the naturally occurring L-amino acids

005599-0900  
 100260-005560



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<210> 73
<211> 323
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (286)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (289)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
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<222> (303)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400>	73															
Ser 1	Thr	His	Ala	Ser 5	Ala	Gly	Leu	Gly	Gly 10	Arg	Arg	Pro	Arg	Leu 15	Arg	
Tyr	Arg	Cys	Leu 20	Ala	Val	Gln	Pro	Gly 25	Arg	Leu	Pro	Ala	Arg 30	Pro	Pro	
Pro	Asp	Gln 35	Gly	Pro	Arg	Pro	Val 40	Pro	Pro	Leu	Ser	Arg 45	Pro	Ala	Lys	
Cys	Arg 50	Pro	Pro	Pro	Ser	Leu 55	Arg	Arg	Ser	Val	Gly 60	Ser	Trp	Lys	Met	
Leu 65	Lys	Ser	Phe	Trp	Gln 70	Lys	Val	Cys	Gly	Met 75	Arg	Thr	Ser	Ala	Leu 80	
Leu	Gln	Gly	Ile	Thr 85	Asp	His	Ile	Leu	Arg 90	Gly	Phe	Gln	Gln	Ile 95	Lys	
Ala	Arg	Tyr	Tyr 100	Trp	Asp	Phe	Gln	Pro 105	Gln	Gly	Gly	Asp	Ile 110	Gly	Gln	
Asp	Ser	Ser 115	Asp	Asp	Asn	His	Ser 120	Gly	Thr	Leu	Gly	Leu 125	Ser	Leu	Thr	
Ser	Asp 130	Ala	Pro	Phe	Leu	Ser 135	Asp	Tyr	Gln	Asp	Glu 140	Gly	Met	Glu	Asp	
Ile 145	Val	Lys	Gly	Ala	Gln 150	Glu	Leu	Asp	Asn	Val 155	Ile	Lys	Gln	Gly	Tyr 160	
Leu	Glu	Lys	Lys	Ser 165	Lys	Asp	His	Ser	Phe 170	Phe	Gly	Ser	Glu	Trp 175	Gln	
Lys	Arg	Trp	Cys 180	Val	Val	Ser	Arg	Gly 185	Leu	Phe	Tyr	Tyr	Tyr 190	Ala	Asn	
Glu	Lys	Ser 195	Lys	Gln	Pro	Lys	Gly 200	Thr	Phe	Leu	Ile	Lys 205	Gly	Tyr	Ser	
Val	Arg 210	Met	Ala	Pro	His	Leu 215	Arg	Arg	Asp	Ser	Lys 220	Lys	Glu	Ser	Cys	
Phe 225	Glu	Leu	Thr	Ser	Gln 230	Asp	Arg	Arg	Ser	Tyr 235	Glu	Phe	Thr	Ala	Thr 240	
Ser	Pro	Ala	Glu	Ala 245	Arg	Asp	Trp	Val	Asp 250	Gln	Ile	Ser	Phe	Leu 255	Leu	
Lys	Asp	Leu	Ser 260	Ser	Leu	Thr	Ile	Pro 265	Tyr	Glu	Glu	Asp	Glu 270	Glu	Glu	
Glu	Glu	Lys 275	Glu	Glu	Thr	Tyr	Asp 280	Asp	Ile	Asp	Gly	Phe 285	Xaa	Ser	Pro	
Xaa	Cys	Gly	Ser	Gln	Cys	Arg	Pro	Thr	Ile	Xaa	Pro	Gly	Ser	Xaa	Gly	



290                      295                      300  
 Ile Lys Glu Pro Thr Glu Glu Lys Glu Glu Glu Asp Ile Tyr Glu Ser  
 305                      310                      315                      320  
 Leu Ala Arg  
  
 <210> 74  
 <211> 327  
 <212> PRT  
 <213> Homo sapiens  
  
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 Asn Cys Gln Gly Thr Gly Asp Phe Asn Leu Lys Val Glu Ala Ala Lys  
 1                      5                      10                      15  
 Ile Ala Arg Ser Arg Ser Val Met Thr Gly Glu Gln Met Ala Ala Phe  
 20                      25                      30  
 His Pro Ser Ser Thr Pro Asn Pro Leu Glu Arg Pro Ile Lys Met Gly  
 35                      40                      45  
 Trp Leu Lys Lys Gln Arg Ser Ile Val Lys Asn Trp Gln Gln Arg Tyr  
 50                      55                      60  
 Phe Val Leu Arg Ala Gln Gln Leu Tyr Tyr Tyr Lys Asp Glu Glu Asp  
 65                      70                      75                      80  
 Thr Lys Pro Gln Gly Cys Met Tyr Leu Pro Gly Cys Thr Ile Lys Glu  
 85                      90                      95  
 Ile Ala Thr Asn Pro Glu Glu Ala Gly Lys Phe Val Phe Glu Ile Ile  
 100                      105                      110  
 Pro Ala Ser Trp Asp Gln Asn Arg Met Gly Gln Asp Ser Tyr Val Leu  
 115                      120                      125  
 Met Ala Ser Ser Gln Ala Glu Met Glu Glu Trp Val Lys Phe Leu Arg  
 130                      135                      140  
 Arg Val Ala Gly Thr Pro Cys Gly Ala Val Phe Gly Gln Arg Leu Asp  
 145                      150                      155                      160  
 Glu Thr Val Ala Tyr Glu Gln Lys Phe Gly Pro His Leu Val Pro Ile  
 165                      170                      175  
 Leu Val Glu Lys Cys Ala Glu Phe Ile Leu Glu His Gly Arg Asn Glu  
 180                      185                      190  
 Glu Gly Ile Phe Arg Leu Pro Gly Gln Asp Asn Leu Val Lys Gln Leu  
 195                      200                      205  
 Arg Asp Ala Phe Asp Ala Gly Glu Arg Pro Ser Phe Asp Arg Asp Thr  
 210                      215                      220  
 Asp Val His Thr Val Ala Ser Leu Leu Lys Leu Tyr Leu Arg Asp Leu  
 225                      230                      235                      240  
 Pro Glu Pro Val Val Pro Trp Ser Gln Tyr Glu Gly Phe Leu Leu Cys  
 245                      250                      255  
 Gly Gln Leu Thr Asn Ala Asp Glu Ala Lys Ala Gln Gln Glu Leu Met  
 260                      265                      270

005599-09001  
 100260-665660

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<210> 75
<211> 283
<212> PRT
<213> Homo sapiens
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<400> Arg 1	Ala	Arg	Met	Gly 5	Arg	Ala	Glu	Leu	Leu 10	Glu	Gly	Lys	Met	Ser 15	Thr
Gln	Asp	Pro	Ser 20	Asp	Leu	Trp	Ser	Arg 25	Ser	Asp	Gly	Glu	Ala 30	Glu	Leu
Leu	Gln	Asp 35	Leu	Gly	Trp	Tyr	His 40	Gly	Asn	Leu	Thr	Arg 45	His	Ala	Ala
Glu	Ala 50	Leu	Leu	Leu	Ser	Asn 55	Gly	Cys	Asp	Gly	Ser 60	Tyr	Leu	Leu	Arg
Asp 65	Ser	Asn	Glu	Thr	Thr 70	Gly	Leu	Tyr	Ser	Leu 75	Ser	Val	Arg	Ala	Lys 80
Asp	Ser	Val	Lys	His 85	Phe	His	Val	Glu	Tyr 90	Thr	Gly	Tyr	Ser	Phe 95	Lys
Phe	Gly	Phe	Asn 100	Glu	Phe	Ser	Ser	Leu 105	Lys	Asp	Phe	Val	Lys 110	His	Phe
Ala	Asn	Gln 115	Pro	Leu	Ile	Gly	Ser 120	Glu	Thr	Gly	Thr	Leu 125	Met	Val	Leu
Lys	His 130	Pro	Tyr	Pro	Arg	Lys 135	Val	Glu	Glu	Pro	Ser 140	Ile	Tyr	Glu	Ser
Val 145	Arg	Val	His	Thr	Ala 150	Met	Gln	Thr	Gly	Arg 155	Thr	Glu	Asp	Asp	Leu 160
Val	Pro	Thr	Ala	Pro 165	Ser	Leu	Gly	Thr	Lys 170	Glu	Gly	Tyr	Leu	Thr 175	Lys
Gln	Gly	Gly	Leu 180	Val	Lys	Thr	Trp	Lys 185	Thr	Arg	Trp	Phe	Thr 190	Leu	His
Arg	Asn	Glu 195	Leu	Lys	Tyr	Phe	Lys 200	Asp	Gln	Met	Ser	Pro 205	Glu	Pro	Ile
Arg	Ile 210	Leu	Asp	Leu	Thr	Glu 215	Cys	Ser	Ala	Val	Gln 220	Phe	Asp	Tyr	Ser
Gln 225	Glu	Arg	Val	Asn	Cys 230	Phe	Cys	Leu	Val	Phe 235	Pro	Phe	Arg	Thr	Phe 240
Tyr	Leu	Cys	Ala	Lys 245	Thr	Gly	Val	Glu	Ala 250	Asp	Glu	Trp	Ile	Lys 255	Ile



50                      55                      60  
 Tyr Gly Asn Ile Val Ile Gln Lys Lys Lys Tyr Asn Lys Gln His Ile  
 65                      70                      75                      80  
 Ile Pro Leu Glu Asn Val Thr Ile Asp Ser Ile Lys Asp Glu Gly Asp  
                     85                      90                      95  
 Leu Arg Asn Gly Trp Leu Ile Lys Thr Pro Thr Lys Ser Phe Ala Val  
                     100                      105                      110  
 Tyr Ala Ala Thr Ala Thr Glu Lys Ser Glu Trp Met Asn His Ile Asn  
                     115                      120                      125  
 Lys Cys Val Thr Asp Leu Leu Ser Lys Ser Gly Lys Thr Pro Ser Asn  
                     130                      135                      140  
 Glu His Ala Ala Val Trp Val Pro Asp Ser Glu Ala Thr Val Cys Met  
 145                      150                      155  
 Arg Cys Gln Lys Ala Lys Phe Thr Pro Val Asn Arg Arg His His Cys  
                     165                      170                      175  
 Arg Lys Cys Gly Phe Val Val Cys Gly Pro Cys Ser Glu Lys Arg Phe  
                     180                      185                      190  
 Leu Leu Pro Ser Gln Ser Ser Lys Pro Val Arg Ile Cys Asp Phe Cys  
                     195                      200                      205  
 Tyr Asp Leu Leu Ser Ala Gly Asp Met Ala Thr Cys Gln Pro Ala Arg  
                     210                      215                      220  
 Ser Asp Ser Tyr Ser Gln Ser Leu Lys Ser Pro Leu Asn Asp Met Ser  
 225                      230                      235                      240  
 Asp Asp Asp Asp Asp Asp Asp Ser Ser Asp  
                     245                      250

<210> 78  
 <211> 224  
 <212> PRT  
 <213> Homo sapiens

<400> 78  
 Leu Asn Ile Leu Leu Arg Ile Asp Phe Asp Glu Gly Cys His Asn Glu  
 1                      5                      10                      15  
 Arg Lys Val Thr Cys Lys His Pro Val Thr Gly Gln Pro Ser Gln Asp  
                     20                      25                      30  
 Asn Cys Ile Phe Val Val Asn Glu Gln Thr Val Ala Thr Met Thr Ser  
                     35                      40                      45  
 Glu Glu Lys Lys Glu Arg Pro Ile Ser Met Ile Asn Glu Ala Ser Asn  
                     50                      55                      60  
 Tyr Asn Val Thr Ser Asp Tyr Ala Val His Pro Met Ser Pro Val Gly  
 65                      70                      75                      80  
 Arg Thr Ser Arg Ala Ser Lys Lys Val His Asn Phe Gly Lys Arg Ser  
                     85                      90                      95  
 Asn Ser Ile Lys Arg Asn Pro Asn Ala Pro Val Val Arg Arg Gly Trp  
                     100                      105                      110

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Leu Tyr Lys Gln Asp Ser Thr Gly Met Lys Leu Trp Lys Lys Arg Trp
      115                      120                      125

Phe Val Leu Ser Asp Leu Cys Leu Phe Tyr Tyr Arg Asp Glu Lys Glu
      130                      135                      140

Glu Gly Ile Leu Gly Ser Ile Leu Leu Pro Ser Phe Gln Ile Ala Leu
      145                      150                      155                      160

Leu Thr Ser Glu Asp His Ile Asn Arg Lys Tyr Ala Phe Lys Ala Ala
      165                      170                      175

His Pro Asn Met Arg Thr Tyr Tyr Phe Cys Thr Asp Thr Gly Lys Glu
      180                      185                      190

Met Glu Leu Trp Met Lys Ala Met Leu Asp Ala Ala Leu Val Gln Thr
      195                      200                      205

Glu Pro Val Lys Arg Val Asp Lys Ile Thr Ser Glu Asn Ala Pro Thr
      210                      215                      220

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<210> 79
<211> 354
<212> PRT
<213> Homo sapiens

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<220>
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<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<220>

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<221> SITE
<222> (145)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (151)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (165)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (166)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (214)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 79
Ser Ala Thr Ser Ser Xaa Thr Thr Cys Ala Cys Thr Pro Pro Glu Pro
 1          5          10          15
Xaa Pro Thr Thr Glu Asp Glu Gly Leu Pro Ala Ala Xaa Pro Ile
          20          25          30
Pro Xaa Arg Arg Ser Xaa Leu Xaa Xaa Thr Cys Phe Thr Thr Pro Ser
          35          40          45
Thr Ala Ala Pro Asp Pro Val Leu Pro Pro Leu Pro Ala Lys Arg His
          50          55          60
Leu Ala Glu Leu Ser Val Pro Pro Val Pro Pro Arg Thr Gly Pro Pro
          65          70          75          80
Arg Leu Leu Val Ser Leu Pro Thr Lys Glu Glu Glu Ser Leu Leu Pro

```

55

85

90

95

Ser Leu Ser Ser 100 Pro Pro Gln Pro Gln 105 Ser Glu Glu Pro Leu Ser Thr  
 Leu Pro Gln Gly 115 Pro Pro Gln Pro Pro Ser Pro Pro Pro Cys Pro Pro  
 Glu Ile Pro Pro Lys Pro Val 135 Arg Leu Phe Pro Glu Phe Asp Asp Ser  
 Xaa Tyr Asp Glu Val 150 Xaa Glu Gly Pro Gly 155 Ala Pro Ala Arg Val  
 Met Thr Lys Lys 165 Xaa Xaa Pro Pro Pro Ser Arg Val Pro Arg Ala Val  
 Arg Val Ala Ser 180 Leu Leu Ser Glu Gly 185 Glu Glu Leu Ser Gly Asp Asp  
 Gln Gly Asp Glu Glu Glu Asp Asp 200 His Ala Tyr Xaa Gly Val Pro Asn  
 Gly Gly Trp His Thr Xaa Ser 215 Leu Ser Leu Ser Leu Pro Ser Thr Ile  
 Ala Ala Pro His Pro Met 230 Asp Gly Pro Pro Gly Gly Ser Thr Pro Val  
 Thr Pro Val Ile Xaa 245 Ala Gly Trp Leu Asp 250 Xaa Asn Pro Pro Gln Gly  
 Ser Tyr Ile Tyr Gln Lys Arg Trp Val 265 Arg Leu Asp Thr Asp His Leu  
 Arg Tyr Phe Asp Ser Asn Lys Asp 280 Ala Tyr Ser Lys Arg Phe Ile Ser  
 Val Ala Cys Ile Ser His Val 295 Ala Ala Ile Gly Asp 300 Gln Lys Phe Glu  
 Val Ile Thr Asn Asn Arg Thr Phe Ala Phe Arg Ala Glu Ser Asp Val  
 Glu Arg Lys Glu Trp Met Gln Ala Leu Gln Gln Ala Met Ala Glu Gln  
 Arg Ala Arg Ala Arg Xaa Ser Ser Ala 345 Tyr Leu Leu Gly Val Pro Gly  
 340 350

Ser Xaa

<210> 80

<211> 251

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (60)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

095559 "09201

<222> (113)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (117)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
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 <223> Xaa equals any of the naturally occurring L-amino acids  
  
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 <223> Xaa equals any of the naturally occurring L-amino acids  
  
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 <222> (122)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
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 <223> Xaa equals any of the naturally occurring L-amino acids  
  
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 <222> (239)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
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 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 80  
 Thr Ile Cys Phe Trp Lys Gln Asp Ser Arg Gly Arg Val Pro Ala Thr  
   1                  5                  10                  15  
 Ala Asp Gln Ala Pro Arg Arg Thr Gln Ala Ser Thr Glu Gln Ala Glu  
           20                  25                  30  
 Thr Asp Asp Asn Met Asp Thr Lys Ser Ile Leu Glu Glu Leu Leu Leu  
           35                  40                  45  
 Lys Arg Ser Gln Gln Lys Lys Lys Met Ser Pro Xaa Asn Tyr Lys Glu  
   50                  55                  60  
 Arg Leu Phe Val Leu Thr Lys Thr Asn Leu Ser Tyr Tyr Glu Tyr Asp  
   65                  70                  75                  80  
 Lys Met Lys Arg Gly Ser Arg Lys Gly Ser Ile Glu Ile Lys Lys Ile  
           85                  90                  95  
 Arg Cys Val Glu Lys Val Asn Leu Glu Glu Gln Thr Pro Val Glu Arg  
           100                  105                  110  
 Xaa Tyr Pro Phe Xaa Ile Val Xaa Lys Xaa Gly Leu Leu Tyr Val Tyr  
   115                  120                  125  
 Ala Ser Asn Glu Glu Ser Arg Ser Gln Trp Leu Lys Ala Leu Gln Lys  
   130                  135                  140  
 Glu Ile Arg Gly Asn Pro His Leu Leu Val Lys Tyr His Ser Gly Phe  
   145                  150                  155                  160  
 Phe Val Asp Gly Lys Phe Leu Cys Cys Gln Gln Ser Cys Lys Ala Ala  
           165                  170                  175

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<210> 81
<211> 268
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 81
Pro Arg Val Arg Leu Ala Glu Leu Leu Lys Tyr Thr Ala Gln Asp His
  1          5          10          15
Ser Asp Tyr Arg Tyr Val Ala Ala Ala Leu Ala Val Met Arg Asn Val
          20          25          30
Thr Gln Gln Ile Asn Glu Arg Lys Arg Arg Leu Glu Asn Ile Asp Lys
          35          40          45
Ile Ala Gln Trp Gln Ala Ser Val Leu Asp Trp Glu Gly Glu Asp Ile
  50          55          60
Leu Asp Arg Ser Ser Glu Leu Ile Tyr Thr Gly Glu Met Ala Trp Ile
  65          70          75          80
Tyr Gln Pro Tyr Xaa Arg Asn Gln Gln Arg Val Phe Phe Leu Phe Asp
          85          90          95
His Gln Met Val Leu Cys Lys Lys Asp Leu Ile Arg Arg Asp Ile Leu
          100          105          110
Tyr Tyr Lys Gly Arg Ile Asp Met Asp Lys Tyr Glu Val Val Asp Ile
          115          120          125
Glu Asp Gly Arg Asp Asp Asp Phe Asn Val Ser Met Lys Asn Ala Phe
          130          135          140
Lys Leu His Asn Lys Glu Thr Glu Glu Ile His Leu Phe Phe Ala Lys
  145          150          155          160
Lys Leu Glu Glu Lys Ile Arg Trp Leu Arg Ala Phe Arg Glu Glu Arg
          165          170          175
Lys Met Val Gln Glu Asp Glu Lys Ile Gly Phe Glu Ile Ser Glu Asn
          180          185          190
Gln Lys Arg Gln Ala Ala Met Thr Val Arg Lys Val Pro Lys Gln Lys
          195          200          205

```

Gly Val Asn Ser Ala Arg Ser Val Pro Pro Ser Tyr Pro Pro Pro Gln  
 210 215 220  
 Asp Pro Leu Asn His Gly Gln Tyr Leu Val Pro Asp Gly Ile Ala Gln  
 225 230 235 240  
 Ser Gln Val Phe Glu Phe Thr Glu Pro Lys Arg Ser Gln Ser Pro Phe  
 245 250 255  
 Trp Gln Asn Phe Ser Arg Leu Thr Pro Phe Lys Lys  
 260 265

<210> 82  
 <211> 380  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (118)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (132)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (365)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 82  
 Thr Leu Ser Val Leu Trp Phe Gln Cys Pro Ala Glu Glu His Ala Ala  
 1 5 10 15  
 Glu Gln Glu Glu Ser His Pro Gln Ser Gly Gly Asp Pro Gly Asp Pro  
 20 25 30  
 Gln Gly Trp Leu Thr Ile Asn Asn Ile Ser Leu Met Lys Gly Gly Ser  
 35 40 45  
 Lys Glu Tyr Trp Phe Val Leu Thr Ala Glu Ser Leu Ser Trp Tyr Lys  
 50 55 60  
 Asp Glu Glu Glu Lys Glu Lys Lys Tyr Met Leu Pro Leu Asp Asn Leu  
 65 70 75 80  
 Lys Ile Arg Asp Val Glu Lys Gly Phe Met Ser Asn Lys His Val Phe  
 85 90 95  
 Ala Ile Phe Asn Thr Glu Gln Arg Asn Val Tyr Lys Asp Leu Arg Gln  
 100 105 110  
 Ile Glu Leu Ala Cys Xaa Ser Gln Glu Asp Val Asp Ser Trp Lys Ala  
 115 120 125  
 Ser Phe Leu Xaa Ala Gly Val Tyr Pro Glu Lys Asp Gln Ala Glu Asn  
 130 135 140  
 Glu Asp Gly Ala Gln Glu Asn Thr Phe Ser Met Asp Pro Gln Leu Glu  
 145 150 155 160  
 Arg Gln Val Glu Thr Ile Arg Asn Leu Val Asp Ser Tyr Val Ala Ile

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<210> 83
<211> 229
<212> PRT
<213> Homo sapiens

<400> 83
Arg Lys Ala Pro Gly Gly Phe Met Gly Pro Arg Trp Arg Arg Arg Trp
  1                               5                10                15
Phe Val Leu Lys Gly His Thr Leu Tyr Trp Tyr Arg Gln Pro Gln Asp
                20                        25                30
Glu Lys Ala Glu Gly Leu Ile Asn Val Ser Asn Tyr Ser Leu Glu Ser
        35                                40                45
Gly His Asp Gln Lys Lys Lys Tyr Val Phe Gln Leu Thr His Asp Val
        50                                55                60
Tyr Lys Pro Phe Ile Phe Ala Ala Asp Thr Leu Thr Asp Leu Ser Met
  65                                70                75                80
Trp Val Arg His Leu Ile Thr Cys Ile Ser Lys Tyr Gln Ser Pro Gly
                85                                90                95

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<210> 84
<211> 119
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

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<400>	84															
Leu	Arg	Ala	Gly	Ser	Leu	Lys	Tyr	Ser	Xaa	Leu	Gln	Ala	Glu	Gly	Asn	
1				5					10					15		
Phe	Asp	Pro	Ser	Cys	Cys	Phe	Thr	Ile	Tyr	His	Gly	Asn	His	Met	Glu	
			20					25					30			
Ser	Leu	Asp	Leu	Ile	Thr	Ser	Asn	Pro	Glu	Glu	Ala	Arg	Thr	Trp	Ile	
		35					40					45				
Thr	Gly	Leu	Lys	Tyr	Leu	Met	Ala	Gly	Ile	Ser	Asp	Glu	Asp	Ser	Leu	
	50					55					60					
Ala	Lys	Arg	Gln	Arg	Thr	His	Asp	Gln	Trp	Val	Lys	Gln	Thr	Phe	Glu	
65					70					75					80	
Glu	Ala	Asp	Lys	Asn	Gly	Asp	Gly	Leu	Leu	Asn	Ile	Glu	Glu	Ile	His	
				85					90					95		

Gln Leu Met His Lys Leu Asn Val Asn Leu Pro Arg Arg Lys Val Xaa  
 100 105 110

Gln Met Phe Xaa Glu Ala Asp  
 115

<210> 85  
 <211> 257  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (212)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (231)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (236)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (238)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (256)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 85  
 Arg Gly Gly His Arg Leu Ser Gly Met Ala Ser Asn Phe Asn Asp Ile  
 1 5 10 15

Val Lys Gln Gly Tyr Val Arg Ile Arg Ser Arg Arg Leu Gly Ile Tyr  
 20 25 30

Gln Arg Cys Trp Leu Val Phe Lys Lys Ala Ser Ser Lys Gly Pro Lys  
 35 40 45

Arg Leu Glu Lys Phe Ser Asp Glu Arg Ala Ala Tyr Phe Arg Cys Tyr  
 50 55 60

His Lys Val Thr Glu Leu Asn Asn Val Lys Asn Val Ala Arg Leu Pro  
 65 70 75 80

Lys Ser Thr Lys Lys His Ala Ile Gly Ile Tyr Phe Asn Asp Asp Thr  
 85 90 95

Ser Lys Thr Phe Ala Cys Glu Ser Asp Leu Glu Ala Asp Glu Trp Cys  
 100 105 110

Lys Val Leu Gln Met Glu Cys Val Gly Thr Arg Ile Asn Asp Ile Ser  
 115 120 125

Leu Gly Glu Pro Asp Leu Leu Ala Thr Gly Val Glu Arg Glu Gln Ser  
 130 135 140

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Trp Phe Ala Thr Phe Leu Phe Val Gln His Asp Gly Leu Val Trp Pro  
180 185 190

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<210> 87
<211> 94
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 87
Ser Asn Pro Pro Lys Ser Ser Ser Leu Ser Leu Ala Ser Ser Ala Ser
  1          5          10          15
Thr Ile Ser Ser Leu Ser Ser Leu Ser Pro Lys Lys Pro Thr Arg Xaa
          20          25          30
Val Asn Lys Ile His Ala Phe Gly Lys Arg Gly Asn Ala Leu Arg Arg
      35          40          45
Asp Pro Asn Leu Pro Val His Ile Arg Gly Trp Leu His Lys Gln Asp
    50          55          60
Ser Ser Gly Leu Arg Leu Trp Lys Arg Arg Trp Phe Val Leu Ser Gly
  65          70          75          80
His Cys Leu Phe Tyr Tyr Lys Asp Ser Arg Glu Arg Val Ser
          85          90

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<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 88  
Leu Phe Pro Leu Val Val Leu Arg Gly Asp Ala Gln Gly Ala Pro Pro  
1 5 10 15  
Phe Lys Asn Trp Ile Met Asn Asn Phe Ile Leu Leu Xaa Glu Leu  
20 25 30

Ile	Lys	Lys	Ser	Gln	Gln	Lys	Arg	Arg	Thr	Ser	Pro	Ser	Asn	Phe	Lys
		35					40					45			
Val	Arg	Phe	Phe	Val	Leu	Thr	Lys	Ala	Ser	Leu	Ala	Tyr	Phe	Glu	Asp
	50					55					60				
Arg	His	Gly	Lys	Lys	Arg	Thr	Leu	Xaa	Gly	Val	His				
65					70					75					

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<210> 89
<211> 246
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (216)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400>	89														
Val	Arg	Thr	Glu	His	Thr	Gly	Glu	Leu	Gln	Lys	Glu	Glu	Ala	Met	Ala
1				5					10					15	
Ala	Val	Ile	Leu	Glu	Ser	Ile	Phe	Leu	Lys	Arg	Ser	Gln	Gln	Lys	Lys
			20					25					30		
Lys	Thr	Ser	Pro	Leu	Asn	Phe	Lys	Lys	Arg	Leu	Phe	Leu	Leu	Thr	Val
		35					40					45			
His	Lys	Leu	Ser	Tyr	Tyr	Glu	Tyr	Asp	Phe	Glu	Arg	Gly	Arg	Arg	Gly
	50					55					60				
Ser	Lys	Lys	Gly	Ser	Ile	Asp	Val	Glu	Lys	Ile	Thr	Cys	Val	Glu	Thr
	65				70					75					80
Val	Val	Pro	Glu	Lys	Asn	Pro	Pro	Pro	Glu	Arg	Gln	Ile	Pro	Arg	Arg
				85					90					95	
Gly	Glu	Glu	Ser	Ser	Glu	Met	Glu	Gln	Ile	Ser	Ile	Ile	Glu	Arg	Phe
			100					105					110		
Pro	Tyr	Pro	Phe	Gln	Val	Val	Tyr	Asp	Glu	Xaa	Pro	Leu	Tyr	Val	Phe
		115					120					125			
Ser	Pro	Thr	Glu	Glu	Leu	Arg	Lys	Arg	Trp	Ile	His	Gln	Leu	Lys	Asn
	130					135					140				
Val	Ile	Arg	Tyr	Asn	Ser	Asp	Leu	Val	Gln	Lys	Tyr	His	Pro	Cys	Phe
	145			150						155					160
Trp	Ile	Asp	Gly	Gln	Tyr	Leu	Cys	Cys	Ser	Gln	Thr	Ala	Lys	Asn	Ala
				165					170					175	
Met	Gly	Cys	Gln	Ile	Leu	Glu	Asn	Arg	Asn	Gly	Ser	Leu	Lys	Pro	Gly
			180					185					190		
Ser	Ser	His	Arg	Lys	Thr	Lys	Lys	Pro	Leu	Pro	Pro	Thr	Pro	Glu	Glu
		195					200					205			
Asp	Gln	Ile	Leu	Lys	Lys	Pro	Xaa	Pro	Pro	Glu	Pro	Ala	Ala	Ala	Pro



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<210> 90
<211> 68
<212> PRT
<213> Homo sapiens
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<400> 90
Lys Phe Glu Ile Trp Tyr Asn Ala Arg Glu Glu Val Tyr Ile Val Gln
  1          5          10          15
Ala Pro Thr Pro Glu Ile Lys Ala Ala Trp Val Asn Glu Ile Arg Lys
          20          25          30
Val Leu Thr Ser Gln Leu Gln Ala Cys Arg Glu Ala Ser Gln His Arg
          35          40          45
Ala Leu Glu Gln Ser Xaa Ser Leu Pro Leu Pro Ala Pro Thr Ser Thr
          50          55          60
Ser Pro Ser Arg
          65

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<210> 91
<211> 133
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>  
<221> SITE  
<222> (46)  
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 91  
Gly Lys Arg Gly Asp Ser Pro Asp Pro Pro Ser Cys Ser Gln Ala Arg  
1 5 10 15  
Ser Leu Thr Arg Tyr Leu Pro Ile Arg Lys Glu Asp Phe Xaa Leu Lys  
20 25 30  
Thr His Ile Glu Ser Ser Gly His Gly Val Asp Thr Cys Xaa His Val  
35 40 45

Val Leu Ser Ser Lys Val Cys Arg Gly Tyr Leu Val Lys Met Gly Gly  
 50 55 60

Lys Ile Xaa Ser Trp Lys Lys Arg Trp Phe Val Phe Asp Arg Leu Lys  
 65 70 75 80

Arg Thr Leu Ser Tyr Tyr Val Asp Lys His Glu Thr Lys Leu Lys Gly  
 85 90 95

Val Ile Tyr Phe Gln Ala Ile Glu Glu Val Tyr Tyr Asp His Leu Arg  
 100 105 110

Ser Ala Ala Lys Ser Pro Asn Pro Ala Leu Thr Phe Cys Val Lys Thr  
 115 120 125

His Asp Arg Leu Tyr  
 130

<210> 92  
 <211> 137  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (17)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (97)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (113)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (115)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 92  
 His Glu Val Leu Phe Leu Gly Met Glu Glu Glu Met Val Arg Val Thr  
 1 5 10 15

Xaa Gly Arg Leu Thr Gly Asp Pro Asp Val Leu Glu Tyr Tyr Lys Asn  
 20 25 30

Asp His Ala Lys Lys Pro Ile Arg Ile Ile Asp Leu Asn Leu Cys Gln  
 35 40 45

Gln Val Asp Ala Gly Leu Thr Phe Asn Lys Lys Glu Phe Glu Asn Ser  
 50 55 60

Tyr Ile Phe Asp Ile Asn Thr Ile Asp Arg Ile Phe Tyr Leu Val Ala  
 65 70 75 80

Asp Ser Glu Glu Glu Met Asn Lys Trp Val Arg Cys Ile Cys Asp Ile  
 85 90 95

Xaa Gly Phe Asn Pro Thr Glu Glu Gly Lys Phe Lys Ile Leu Leu Phe  
 100 105 110

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Ile Leu Cys Tyr Phe Ser Tyr Thr Ile  
130 135

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<210> 93
<211> 304
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (210)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (253)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (275)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (284)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (286)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (290)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 93  
Ser Ser Arg Ser Leu Met Glu Gln Gly Ile Gln Glu Asp Glu Gln Leu  
1 5 10 15

Leu Tyr Asp Leu Xaa Tyr Tyr Ser Phe Phe Asp Leu Asn Pro Lys Tyr  
20 25 30

Asp Ala Val Arg Ile Asn Gln Leu Tyr Glu Gln Ala Arg Trp Ala Ile  
35 40 45

Leu Leu Glu Glu Ile Asp Cys Thr Glu Glu Glu Met Leu Ile Phe Ala  
50 55 60

Ala Leu Gln Tyr His Ile Ser Lys Leu Ser Leu Ser Ala Glu Thr Gln  
65 70 75 80

Asp Phe Ala Gly Glu Ser Glu Val Asp Glu Ile Glu Ala Ala Leu Ser  
85 90 95

Asn Leu Glu Val Thr Leu Glu Gly Gly Lys Ala Asp Ser Leu Leu Glu  
 100 105 110  
 Asp Ile Thr Asp Ile Pro Lys Leu Ala Asp Asn Leu Lys Leu Phe Arg  
 115 120 125  
 Pro Lys Lys Leu Leu Pro Lys Ala Phe Lys Gln Tyr Trp Phe Ile Phe  
 130 135 140  
 Lys Asp Thr Ser Ile Ala Tyr Phe Lys Asn Lys Glu Leu Glu Gln Gly  
 145 150 155 160  
 Glu Pro Leu Glu Lys Leu Asn Leu Arg Gly Cys Glu Val Val Pro Asp  
 165 170 175  
 Val Asn Val Ala Gly Arg Lys Phe Gly Ile Lys Leu Leu Ile Pro Val  
 180 185 190  
 Ala Asp Gly Met Asn Glu Met Tyr Leu Arg Cys Asp His Glu Asn Gln  
 195 200 205  
 Tyr Xaa Gln Trp Met Ala Ala Cys Met Leu Ala Ser Lys Gly Lys Thr  
 210 215 220  
 Met Ala Asp Ser Ser Tyr Gln Pro Glu Val Leu Asn Ile Leu Ser Phe  
 225 230 235 240  
 Leu Arg Met Lys Asn Arg Asn Ser Ala Ser Gln Val Xaa Ser Ser Leu  
 245 250 255  
 Glu Asn Met Asp Met Asn Pro Glu Trp Phe Gly Ser Pro Arg Cys Ala  
 260 265 270  
 Lys Arg Xaa Gln Ile Pro Asn Ser Leu Gly Pro Xaa Arg Xaa Pro Gly  
 275 280 285  
 Lys Xaa Ala Thr Gln Lys Pro Val Gly Pro Lys Asn Cys Pro Pro Trp  
 290 295 300

<210> 94  
 <211> 302  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (257)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (263)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (270)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (277)

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$\langle 220 \rangle$ 

$\langle 222 \rangle$  (278)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 94

Asn Ser Ala Glu Val Asp Ser Ile Pro Lys Ser Leu Ser Asp Ser Leu  
1 5 10 15

Ser Pro Ser Leu Ser Ser Gly Thr Leu Ser Thr Ser Thr Ser Ile Ser  
20 25 30

Ser Gln Ile Ser Thr Thr Thr Phe Glu Ser Ala Ile Thr Pro Ser Glu  
35 40 45

Ser Ser Gly Tyr Asp Ser Gly Asp Ile Glu Ser Leu Val Asp Arg Glu  
50 55 60

Lys Glu Leu Ala Thr Lys Cys Leu Gln Leu Leu Thr His Thr Phe Asn  
65 70 75 80

Arg Glu Phe Ser Gln Val His Gly Ser Val Ser Asp Cys Lys Leu Ser  
85 90 95

Asp Ile Ser Pro Ile Gly Arg Asp Pro Ser Glu Ser Ser Phe Ser Ser  
100 105 110

Ala Thr Leu Thr Pro Ser Ser Thr Cys Pro Ser Leu Val Asp Ser Arg  
115 120 125

Ser Asn Ser Leu Asp Gln Lys Thr Pro Glu Ala Asn Ser Arg Ala Ser  
130 135 140

Ser Pro Cys Pro Glu Phe Glu Gln Phe Gln Ile Val Pro Ala Val Glu  
145 150 155 160

Thr Pro Tyr Leu Ala Arg Ala Gly Lys Asn Glu Phe Leu Asn Leu Val  
165 170 175

Pro Asp Ile Glu Glu Ile Arg Pro Ser Ser Val Val Ser Lys Lys Gly  
180 185 190

Tyr Leu His Phe Lys Glu Pro Leu Tyr Ser Asn Trp Ala Lys His Phe  
195 200 205

Val Val Val Arg Arg Pro Tyr Val Phe Ile Tyr Asn Ser Asp Lys Asp  
210 215 220

Pro Val Glu Arg Gly Ile Ile Asn Leu Ser Thr Ala Gln Val Glu Tyr  
225 230 235 240

Ser Glu Asp Gln Gln Ala Met Val Lys Thr Pro Asn Thr Phe Ala Val  
245 250 255

Xaa Thr Lys His Arg Gly Xaa Leu Leu Gln Ala Leu Asn Xaa Lys Asp  
260 265 270

Met Asn Asp Trp Xaa Xaa Ala Phe Asn Pro Leu Leu Ala Gly Thr Ile  
275 280 285

Arg Ser Lys Leu Ser Arg Arg Cys Pro Ser Gln Ser Lys Tyr  
290 295 300

<400> 96																
Glu	Glu	Arg	Val	Ser	Val	Ala	Gly	Ala	Ser	Gly	Thr	Met	Ser	Asp	Val	
1				5					10					15		
Ala	Ile	Val	Lys	Glu	Gly	Trp	Leu	His	Lys	Arg	Gly	Glu	Tyr	Ile	Lys	
			20					25					30			
Thr	Trp	Arg	Pro	Arg	Tyr	Phe	Leu	Leu	Lys	Asn	Asp	Gly	Thr	Phe	Ile	
		35					40					45				
Gly	Tyr	Lys	Glu	Arg	Pro	Gln	Asp	Val	Asp	Gln	Arg	Glu	Ala	Pro	Leu	
	50					55					60					
Asn	Asn	Phe	Ser	Val	Ala	Gln	Cys	Gln	Leu	Met	Lys	Thr	Glu	Arg	Pro	
65					70					75					80	
Arg	Pro	Asn	Thr	Phe	Ile	Ile	Arg	Cys	Leu	Gln	Trp	Thr	Thr	Val	Ile	
				85					90					95		
Glu	Arg	Thr	Phe	His	Val	Glu	Thr	Pro	Glu	Glu	Arg	Glu	Glu	Trp	Thr	
			100					105					110			

Thr	Ala	Ile 115	Gln	Thr	Val	Ala	Asp 120	Gly	Leu	Lys	Lys	Gln 125	Glu	Glu	Glu
Glu	Met 130	Asp	Phe	Arg	Ser	Gly 135	Ser	Pro	Ser	Asp	Asn 140	Ser	Gly	Ala	Glu
Glu 145	Met	Glu	Val	Ser	Leu 150	Ala	Lys	Pro	Lys	His 155	Arg	Val	Thr	Met	Asn 160
Glu	Phe	Glu	Tyr	Leu 165	Lys	Leu	Leu	Gly	Lys 170	Gly	Thr	Phe	Gly	Lys 175	Val
Ile	Leu	Val	Lys 180	Glu	Lys	Ala	Thr	Gly 185	Arg	Tyr	Tyr	Ala	Met 190	Lys	Ile
Leu	Lys	Lys 195	Glu	Val	Ile	Val	Ala 200	Lys	Asp	Glu	Val	Ala 205	His	Thr	Leu
Thr	Glu 210	Asn	Arg	Val	Leu	Gln 215	Asn	Ser	Arg	His	Pro 220	Phe	Leu	Thr	Ala
Leu 225	Lys	Tyr	Ser	Phe	Gln 230	Thr	His	Asp	Arg	Leu 235	Cys	Phe	Val	Met	Glu 240
Tyr	Ala	Asn	Gly	Gly 245	Glu	Leu	Phe	Phe	His 250	Leu	Ser	Arg	Glu	Arg 255	Val
Phe	Ser	Glu	Asp 260	Arg	Ala	Arg	Phe	Tyr 265	Gly	Ala	Glu	Ile	Val 270	Ser	Ala
Leu	Asp	Tyr 275	Leu	His	Ser	Glu	Lys 280	Asn	Val	Val	Tyr	Arg 285	Asp	Leu	Lys
Leu	Glu 290	Asn	Leu	Met	Leu	Asp 295	Lys	Asp	Gly	His	Ile 300	Lys	Ile	Thr	Asp
Phe 305	Gly	Leu	Cys	Lys	Glu 310	Gly	Ile	Lys	Asp	Gly 315	Ala	Thr	Met	Lys	Thr 320
Phe	Cys	Gly	Thr	Pro 325	Glu	Tyr	Leu	Ala	Pro 330	Glu	Val	Leu	Glu	Asp 335	Asn
Asp	Tyr	Gly	Arg 340	Ala	Val	Asp	Trp	Trp 345	Gly	Leu	Gly	Val	Val 350	Met	Tyr
Glu	Met	Met 355	Cys	Gly	Arg	Leu	Pro 360	Phe	Tyr	Asn	Gln 365	Asp	His	Glu	Lys
Leu	Phe 370	Glu	Leu	Ile	Leu	Met 375	Glu	Glu	Ile	Arg	Phe 380	Pro	Arg	Thr	Leu
Gly 385	Pro	Glu	Ala	Lys	Ser 390	Leu	Leu	Ser	Gly	Leu 395	Leu	Lys	Lys	Asp	Pro 400
Lys	Gln	Arg	Leu	Gly 405	Gly	Gly	Ser	Glu	Asp 410	Ala	Lys	Glu	Ile	Met 415	Gln
His	Arg	Phe	Phe 420	Ala	Gly	Ile	Val	Trp 425	Gln	His	Val	Tyr	Glu 430	Lys	Lys
Leu	Ser	Pro 435	Pro	Phe	Lys	Pro	Gln 440	Val	Thr	Ser	Glu 445	Thr	Asp	Thr	Arg
Tyr	Phe 450	Asp	Glu	Glu	Phe	Thr 455	Ala	Gln	Met	Ile	Thr 460	Ile	Thr	Pro	Pro

<400> 97															
Pro 1	Thr	Arg	Pro	Pro 5	Thr	Arg	Pro	Pro	Thr 10	Arg	Pro	Ser	Arg	Arg 15	Gly
Ile	Ala	Val	Ala 20	Ser	Trp	Cys	Ser	Pro 25	Arg	Trp	Phe	Ala	Gly 30	Glu	Glu
Met	Ala	Phe 35	Val	Lys	Ser	Gly	Trp 40	Leu	Leu	Arg	Gln	Ser 45	Thr	Ile	Leu
Lys	Arg 50	Trp	Lys	Lys	Asn	Trp 55	Phe	Asp	Leu	Trp	Ser 60	Asp	Gly	His	Leu
Ile 65	Tyr	Tyr	Asp	Asp	Gln 70	Thr	Arg	Gln	Asn	Ile 75	Glu	Asp	Lys	Val	His 80
Met	Pro	Met	Asp	Cys 85	Ile	Asn	Ile	Arg	Thr 90	Gly	Gln	Glu	Cys	Arg 95	Asp
Thr	Gln	Pro	Pro 100	Asp	Gly	Lys	Ser	Lys 105	Asp	Cys	Met	Leu	Gln 110	Ile	Val
Cys	Arg	Asp 115	Gly	Lys	Thr	Ile	Ser 120	Leu	Cys	Ala	Glu	Ser 125	Thr	Asp	Asp
Cys	Leu 130	Ala	Trp	Lys	Phe	Thr 135	Leu	Gln	Asp	Ser	Arg 140	Thr	Asn	Thr	Ala
Tyr 145	Val	Gly	Ser	Ala	Val 150	Met	Thr	Asp	Glu	Thr 155	Ser	Val	Val	Ser	Ser 160
Pro	Pro	Pro	Tyr	Thr 165	Ala	Tyr	Ala	Ala	Pro 170	Ala	Pro	Glu	Gln	Ala 175	Tyr
Gly	Tyr	Gly	Pro 180	Tyr	Gly	Gly	Ala	Tyr 185	Pro	Pro	Gly	Thr	Gln 190	Val	Val
Tyr	Ala	Ala 195	Asn	Gly	Gln	Ala	Tyr 200	Ala	Val	Pro	Tyr	Gln 205	Tyr	Pro	Tyr
Ala	Gly 210	Leu	Tyr	Gly	Gln	Gln 215	Pro	Ala	Asn	Gln	Val 220	Ile	Ile	Arg	Glu
Arg	Tyr	Arg	Asp	Asn	Asp	Ser	Asp	Leu	Ala	Leu	Gly	Met	Leu	Ala	Gly



225	230										235					240				
Ala	Ala	Thr	Xaa	Met	Ala	Leu	Xaa	Ser	Leu	Phe	Trp	Val	Phe							
				245					250											
<210> 98																				
<211> 705																				
<212> PRT																				
<213> Homo sapiens																				
<220>																				
<221> SITE																				
<222> (27)																				
<223> Xaa equals any of the naturally occurring L-amino acids																				
<220>																				
<221> SITE																				
<222> (290)																				
<223> Xaa equals any of the naturally occurring L-amino acids																				
<400> 98																				
Met	Ala	Met	Glu	Lys	Ser	Lys	Ala	Thr	Pro	Ala	Ala	Arg	Ala	Ser	Lys					
1				5					10					15						
Lys	Ile	Leu	Leu	Pro	Glu	Pro	Ser	Ile	Arg	Xaa	Val	Met	Gln	Lys	Tyr					
			20					25					30							
Leu	Glu	Asp	Arg	Gly	Glu	Val	Thr	Phe	Glu	Lys	Ile	Phe	Ser	Gln	Lys					
		35					40					45								
Leu	Gly	Tyr	Leu	Leu	Phe	Arg	Asp	Phe	Cys	Leu	Asn	His	Leu	Glu	Glu					
	50					55					60									
Ala	Arg	Pro	Leu	Val	Glu	Phe	Tyr	Glu	Glu	Ile	Lys	Lys	Tyr	Glu	Lys					
	65				70					75					80					
Leu	Glu	Thr	Glu	Glu	Glu	Arg	Val	Ala	Arg	Ser	Arg	Glu	Ile	Phe	Asp					
				85					90					95						
Ser	Tyr	Ile	Met	Lys	Glu	Leu	Leu	Ala	Cys	Ser	His	Pro	Phe	Ser	Lys					
			100					105					110							
Ser	Ala	Thr	Glu	His	Val	Gln	Gly	His	Leu	Gly	Lys	Lys	Gln	Val	Pro					
		115					120					125								
Pro	Asp	Leu	Phe	Gln	Pro	Tyr	Ile	Glu	Glu	Ile	Cys	Gln	Asn	Leu	Arg					
	130					135					140									
Gly	Asp	Val	Phe	Gln	Lys	Phe	Ile	Glu	Ser	Asp	Lys	Phe	Thr	Arg	Phe					
	145				150					155					160					
Cys	Gln	Trp	Lys	Asn	Val	Glu	Leu	Asn	Ile	His	Leu	Thr	Met	Asn	Asp					
				165					170					175						
Phe	Ser	Val	His	Arg	Ile	Ile	Gly	Arg	Gly	Gly	Phe	Gly	Glu	Val	Tyr					
			180					185					190							
Gly	Cys	Arg	Lys	Ala	Asp	Thr	Gly	Lys	Met	Tyr	Ala	Met	Lys	Cys	Leu					
		195					200					205								
Asp	Lys	Lys	Arg	Ile	Lys	Met	Lys	Gln	Gly	Glu	Thr	Leu	Ala	Leu	Asn					
	210					215					220									
Glu	Arg	Ile	Met	Leu	Ser	Leu	Val	Ser	Thr	Gly	Asp	Cys	Pro	Phe	Ile					
	225				230					235					240					



Gln Ser Val Glu Glu Thr Gln Ile Lys Glu Arg Lys Cys Leu Leu Leu  
           595                          600                          605  
 Lys Ile Arg Gly Gly Lys Gln Phe Ile Leu Gln Cys Asp Ser Asp Pro  
           610                          615                          620  
 Glu Leu Val Gln Trp Lys Lys Glu Leu Arg Asp Pro Thr Ala Ser Pro  
   625                          630                          635                          640  
 Ala Ala Gly Ala Ala Gly Ala Gln Asp Glu Glu Gln Ala Ala Leu Ala  
                           645                          650                          655  
 Arg Gly Gly Ala Glu Gln Gly Ala Ala Gly Pro Ala Arg Gln Cys Gln  
                           660                          665                          670  
 Arg Pro Leu Thr Arg Pro Pro Ala Phe Tyr Lys Pro Leu Ile Tyr Phe  
           675                          680                          685  
 Val Glu Phe Leu Leu Phe Val Phe Pro Pro Ser Gly Lys Gly Phe Ile  
           690                          695                          700  
 Leu  
 705  
  
 <210> 99  
 <211> 558  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SITE  
 <222> (125)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 99  
 Asp Leu Phe Ser Asp Val Leu Glu Glu Gly Glu Leu Asp Met Glu Lys  
   1                          5                          10                          15  
 Ser Gln Glu Glu Met Asp Gln Ala Leu Ala Glu Ser Ser Glu Glu Gln  
           20                          25                          30  
 Glu Asp Ala Leu Asn Ile Ser Ser Met Ser Leu Leu Ala Pro Leu Ala  
           35                          40                          45  
 Gln Thr Val Gly Val Val Ser Pro Glu Ser Leu Val Ser Thr Pro Arg  
           50                          55                          60  
 Leu Glu Leu Lys Asp Thr Ser Arg Ser Asp Glu Ser Pro Lys Pro Gly  
   65                          70                          75                          80  
 Lys Phe Gln Arg Thr Arg Val Pro Arg Ala Glu Ser Gly Asp Ser Leu  
           85                          90                          95  
 Gly Ser Glu Asp Arg Asp Leu Leu Tyr Ser Ile Asp Ala Tyr Arg Ser  
           100                          105                          110  
 Gln Arg Phe Lys Glu Thr Glu Arg Pro Ser Ile Lys Xaa Val Ile Val  
           115                          120                          125  
 Arg Lys Glu Asp Val Thr Ser Lys Leu Asp Glu Lys Asn Asn Ala Phe  
           130                          135                          140  
 Pro Cys Gln Val Asn Ile Lys Gln Lys Met Gln Glu Leu Asn Asn Glu  
   145                          150                          155                          160

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Ser Pro Ser Ala Asp Ser Thr Val Leu Leu Ala Pro Ser Val Gln Asp  
                   20                                  25                                  30  
 Ser Gly Ser Leu His Asn Ser Ser Ser Gly Glu Ser Thr Tyr Cys Met  
                   35                                  40                                  45  
 Pro Gln Asn Ala Gly Asp Leu Pro Ser Pro Asp Gly Asp Tyr Asp Tyr  
                   50                                  55                                  60  
 Asp Gln Asp Asp Tyr Glu Asp Gly Ala Ile Thr Ser Gly Ser Ser Val  
                   65                                  70                                  75                                  80  
 Thr Phe Ser Asn Ser Tyr Gly Ser Gln Trp Ser Pro Asp Tyr Arg Cys  
                                   85                                  90                                  95  
 Ser Val Gly Thr Tyr Asn Ser Ser Gly Ala Tyr Arg Phe Ser Ser Glu  
                                   100                                  105                                  110  
 Gly Ala Gln Ser Ser Phe Glu Asp Ser Glu Glu Asp Phe Asp Ser Arg  
                                   115                                  120                                  125  
 Phe Asp Thr Asp Asp Glu Leu Ser Tyr Arg Arg Asp Ser Val Tyr Ser  
                   130                                  135                                  140  
 Cys Val Thr Leu Pro Tyr Phe His Ser Phe Leu Tyr Met Lys Gly Gly  
                   145                                  150                                  155                                  160  
 Leu Met Asn Ser Trp Lys Arg Arg Trp Cys Val Leu Lys Asp Glu Thr  
                                   165                                  170                                  175  
 Phe Leu Trp Phe Arg Ser Lys Gln Glu Ala Leu Lys Gln Gly Trp Leu  
                                   180                                  185                                  190  
 His Lys Lys Gly Gly Gly Ser Ser Thr Leu Ser Arg Arg Asn Trp Lys  
                                   195                                  200                                  205  
 Lys Arg Trp Phe Val Leu Arg Gln Ser Lys Leu Met Tyr Phe Glu Asn  
                   210                                  215                                  220  
 Asp Ser Glu Glu Lys Leu Lys Gly Thr Val Glu Val Arg Thr Ala Lys  
                   225                                  230                                  235                                  240  
 Glu Ile Ile Asp Asn Thr Thr Lys Glu Asn Gly Ile Asp Ile Ile Met  
                                   245                                  250                                  255  
 Ala Asp Arg Thr Phe His Leu Ile Ala Glu Ser Pro Glu Asp Ala Ser  
                                   260                                  265                                  270  
 Gln Trp Phe Ser Val Leu Ser Gln Val His Ala Ser Thr Asp Gln Glu  
                                   275                                  280                                  285  
 Ile Gln Glu Met His Asp Glu Gln Ala Asn Pro Gln Asn Ala Val Gly  
                   290                                  295                                  300  
 Thr Leu Asp Val Gly Leu Ile Asp Ser Val Cys Ala Ser Asp Ser Pro  
                   305                                  310                                  315                                  320  
 Asp Arg Pro Asn Ser Phe Val Ile Ile Thr Ala Asn Arg Val Leu His  
                                   325                                  330                                  335  
 Cys Asn Ala Asp Thr Pro Glu Arg Cys Thr Thr Gly  
                                   340                                  345

&lt;210&gt; 102

&lt;211&gt; 128

T00250.655550

<213> Homo sapiens

Asp Pro Arg Val Arg Trp Ser Trp Glu Pro Phe Pro Ser Glu Gln Gln  
1 5 10 15

Leu Ile Met Glu Glu Asn Asn Asp Ser Thr Glu Asn Pro Gln Gln Gly  
35 40 45

Gly Phe Val Lys Thr Trp His Thr Arg Trp Phe Val Leu Lys Gly Asp  
65 70 75 80

Phe Phe Cys Leu Glu Ile Lys Phe Ser Glu His Pro Cys Asn Glu Glu  
100 105 110

Asn Pro Gly Lys Phe Leu Phe Glu Val Val Pro Gly Lys Ile Phe Ser  
115 120 125

 $\langle 211 \rangle$  143

<213> Homo sapiens

His Ala Ser Asp His Leu Phe Phe Phe Ala Phe Ser Tyr Cys Trp Ser  
1 5 10 15

Ser Ser Gln Gln Gly Lys Ser Ile Ser Leu Ile Met Glu Glu Asn Asn  
35 40 45

Asp Ser Thr Glu Asn Pro Gln Gln Gly Gln Gly Arg Gln Asn Ala Ile  
50 55 60

Lys Cys Gly Trp Leu Arg Lys Gln Gly Gly Phe Val Lys Thr Trp His  
65 70 75 80

Thr Arg Trp Phe Val Leu Lys Gly Asp Gln Leu Tyr Tyr Phe Lys Asp  
85 90 95

Glu Asp Glu Thr Lys Pro Leu Gly Thr Ile Phe Leu Pro Gly Asn Lys  
100 105 110

Val Ser Glu His Pro Cys Asn Glu Glu Asn Pro Gly Lys Phe Leu Phe  
115 120 125

Glu Val Val Pro Gly Arg Arg Ser Arg Ser Asp Asp Ser Lys Ser  
130 135 140

<210> 104  
 <211> 481  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (246)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (373)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (374)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (380)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (480)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 104  
 Gly Arg Trp Ala Ala Pro Ser Ser Arg Leu Ala Pro Gln Leu Pro Pro  
 1 5 10 15  
 Thr Thr Ala Ala Glu Arg Ser Trp Gly Leu Thr Arg Arg Leu Arg Gly  
 20 25 30  
 Leu Gly Pro Arg Arg Arg Gly Asp Leu Gly Gly Thr Gly Ser Leu Arg  
 35 40 45  
 Pro Ala Ser Leu Gly Ala Pro His Gly Ile Cys Arg Phe Thr Glu Trp  
 50 55 60  
 Leu His Ile Asn Gly Lys Arg Ser Ile Asn Leu Ser Ser Phe Ile Met  
 65 70 75 80  
 Glu Gly Gly Leu Ala Asp Gly Glu Pro Asp Arg Thr Ser Leu Leu Gly  
 85 90 95  
 Asp Ser Lys Asp Val Leu Gly Pro Ser Thr Val Val Ala Asn Ser Asp  
 100 105 110  
 Glu Ser Gln Leu Leu Thr Pro Gly Lys Met Ser Gln Arg Gln Gly Lys  
 115 120 125  
 Glu Ala Tyr Pro Thr Pro Thr Lys Asp Leu His Gln Pro Ser Leu Ser  
 130 135 140  
 Pro Ala Ser Pro His Ser Gln Gly Phe Glu Arg Gly Lys Glu Asp Ile  
 145 150 155 160  
 Ser Gln Asn Lys Asp Glu Ser Ser Leu Ser Met Ser Lys Ser Lys Ser  
 165 170 175  
 Glu Ser Lys Leu Tyr Asn Gly Ser Glu Lys Asp Ser Ser Thr Ser Ser  
 180 185 190

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 00220-6655660



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<210> 105
<211> 131
<212> PRT
<213> Homo sapiens

<400> 105
Pro Gly Ser His Thr Ile Leu Arg Arg Ser Gln Ser Tyr Ile Pro Thr
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<210> 106
<211> 91
<212> PRT
<213> Homo sapiens
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<210> 107
<211> 123
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (113)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 107
Gly Val Tyr Met Ala Thr Phe Tyr Glu Phe Phe Asn Glu Gln Lys Tyr
  1             5             10             15
Ala Asp Ala Val Lys Asn Phe Leu Asp Leu Ile Ser Ser Ser Gly Arg
      20             25             30
Arg Asp Pro Lys Ser Val Glu Gln Pro Ile Val Leu Lys Glu Gly Phe
      35             40             45
Met Ile Lys Arg Ala Gln Gly Arg Lys Arg Phe Gly Met Lys Asn Phe
      50             55             60
Lys Lys Arg Trp Phe Arg Leu Thr Asn His Gly Ile Tyr Leu Pro Gln
      65             70             75             80
Lys Gln Arg Gly Pro Ala Ser Leu Gln His Ser His Arg Gly Thr Ser
      85             90             95
Trp Ala Val Glu Glu Ala Xaa Gly Gly Ser Val Phe Lys Met Glu Lys
      100            105            110
Xaa Val Ser Arg Xaa Ile Pro Val Gln Ser Val
      115            120

<210> 108
<211> 155
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (140)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (144)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 108
Arg Trp Ala Ala Val Pro Cys Arg Arg Ala Leu Leu Leu Cys Asn Gly
  1             5             10             15
Met Arg Tyr Lys Leu Leu Gln Glu Gly Asp Ile Gln Val Cys Val Ile
      20             25             30
Arg His Pro Arg Thr Phe Leu Ser Lys Ile Leu Thr Ser Lys Phe Leu
      35             40             45
Arg Arg Trp Glu Pro His His Leu Thr Leu Ala Asp Asn Ser Leu Ala
      50             55             60
Ser Ala Thr Pro Thr Gly Tyr Met Glu Asn Ser Val Ser Tyr Ser Ala
      65             70             75             80
Ile Glu Asp Val Gln Leu Leu Ser Trp Glu Asn Ala Pro Lys Tyr Cys
      85             90             95

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Leu Gln Leu Thr Ile Pro Gly Gly Thr Val Leu Leu Gln Ala Ala Asn  
 100 105 110  
 Ser Tyr Leu Arg Asp Gln Trp Phe His Ser Leu Gln Trp Lys Lys Lys  
 115 120 125  
 Ile Tyr Lys Tyr Lys Lys Val Leu Ser Asn Pro Xaa Arg Trp Glu Xaa  
 130 135 140  
 Val Leu Lys Glu Ile Arg Thr Leu Val Asp Ile  
 145 150 155

<210> 109  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 109  
 Leu Tyr Gly Cys Glu Lys Thr Thr Glu Gly Asp Glu Asn Arg Ser Phe  
 1 5 10 15  
 Glu Gly Thr Leu Tyr Lys Arg Gly Ala Leu Leu Lys Gly Trp Lys Pro  
 20 25 30  
 Arg Trp Phe Val Leu Asp Val Thr Lys His Gln Leu Arg Tyr Tyr Asp  
 35 40 45  
 Ser Gly Glu Asp Thr Ser Cys Lys Gly His Ile Asp Leu Ala Glu Val  
 50 55 60  
 Glu Met Val Ile Pro Ala Gly Pro Ser Met Gly Ala Pro Lys His Thr  
 65 70 75 80  
 Ser Asp Lys Ala Phe Phe Asp Leu Lys Thr Ser Lys Arg Val Tyr Asn  
 85 90 95  
 Phe Cys Ala Gln Asp Gly Gln Ser Ala Gln Gln Trp Met Asp Lys Ile  
 100 105 110  
 Gln Ser Cys Ile Ser Asp Ala  
 115

<210> 110  
 <211> 455  
 <212> PRT  
 <213> Homo sapiens

<400> 110  
 His Arg Thr Lys Gly Arg Val Phe Ser Ala Leu Arg Thr Gly Ala Glu  
 1 5 10 15  
 Glu Ala Ala Val Ala Pro Gly Ala Phe Glu Arg Ala His Pro Ser Pro  
 20 25 30  
 Arg Ala Asn Ala Asp Pro Gly Pro Thr Gly Gly Thr Ala Pro Asp Ser  
 35 40 45  
 Pro Arg Ala Phe Leu Ala Ala Met Glu Asp Gly Val Tyr Glu Pro Pro  
 50 55 60  
 Asp Leu Thr Pro Glu Glu Arg Met Glu Leu Glu Asn Ile Arg Arg Arg  
 65 70 75 80  
 Lys Gln Glu Leu Leu Val Glu Ile Gln Arg Leu Arg Glu Glu Leu Ser

85					90					95					
Glu	Ala	Met	Ser	Glu	Val	Glu	Gly	Leu	Glu	Ala	Asn	Glu	Gly	Ser	Lys
			100					105					110		
Thr	Leu	Gln	Arg	Asn	Arg	Lys	Met	Ala	Met	Gly	Arg	Lys	Lys	Phe	Asn
		115					120					125			
Met	Asp	Pro	Lys	Lys	Gly	Ile	Gln	Phe	Leu	Val	Glu	Asn	Glu	Leu	Leu
	130					135					140				
Gln	Asn	Thr	Pro	Glu	Glu	Ile	Ala	Arg	Phe	Leu	Tyr	Lys	Gly	Glu	Gly
	145					150					155				160
Leu	Asn	Lys	Thr	Ala	Ile	Gly	Asp	Tyr	Leu	Gly	Glu	Arg	Glu	Glu	Leu
				165					170						175
Asn	Leu	Ala	Val	Leu	His	Ala	Phe	Val	Asp	Leu	His	Glu	Phe	Thr	Asp
			180					185					190		
Leu	Asn	Leu	Val	Gln	Ala	Leu	Arg	Gln	Phe	Leu	Trp	Ser	Phe	Arg	Leu
		195					200					205			
Pro	Gly	Glu	Ala	Gln	Lys	Ile	Asp	Arg	Met	Met	Glu	Ala	Phe	Ala	Gln
	210					215					220				
Arg	Tyr	Cys	Leu	Cys	Asn	Pro	Gly	Val	Phe	Gln	Ser	Thr	Asp	Thr	Cys
	225					230					235				240
Tyr	Val	Leu	Ser	Phe	Ala	Val	Ile	Met	Leu	Asn	Thr	Ser	Leu	His	Asn
				245					250					255	
Pro	Asn	Val	Arg	Asp	Lys	Pro	Gly	Leu	Glu	Arg	Phe	Val	Ala	Met	Asn
			260					265					270		
Arg	Gly	Ile	Asn	Glu	Gly	Gly	Asp	Leu	Pro	Glu	Glu	Leu	Leu	Arg	Asn
		275					280					285			
Leu	Tyr	Asp	Ser	Ile	Arg	Asn	Glu	Pro	Phe	Lys	Ile	Pro	Glu	Asp	Asp
	290					295					300				
Gly	Asn	Asp	Leu	Thr	His	Thr	Phe	Phe	Asn	Pro	Asp	Arg	Glu	Gly	Trp
	305					310					315				320
Leu	Leu	Lys	Leu	Gly	Gly	Gly	Arg	Val	Lys	Thr	Trp	Lys	Arg	Arg	Trp
				325					330						335
Phe	Ile	Leu	Thr	Asp	Asn	Cys	Leu	Tyr	Tyr	Phe	Glu	Tyr	Thr	Thr	Asp
			340					345					350		
Lys	Glu	Pro	Arg	Gly	Ile	Ile	Pro	Leu	Glu	Asn	Leu	Ser	Ile	Arg	Glu
		355					360						365		
Val	Asp	Asp	Pro	Arg	Lys	Pro	Asn	Cys	Phe	Glu	Leu	Tyr	Ile	Pro	Asn
	370					375					380				
Asn	Lys	Gly	Gln	Leu	Ile	Lys	Ala	Cys	Lys	Thr	Glu	Ala	Asp	Gly	Arg
	385					390					395				400
Val	Val	Glu	Gly	Asn	His	Met	Val	Tyr	Arg	Ile	Ser	Ala	Pro	Thr	Gln
				405					410					415	
Glu	Glu	Lys	Asp	Glu	Trp	Ile	Lys	Ser	Ile	Gln	Ala	Ala	Val	Ser	Val
			420					425					430		
Asp	Pro	Phe	Tyr	Glu	Met	Leu	Ala	Ala	Arg	Lys	Lys	Arg	Ile	Ser	Val

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435

440

445

Lys Lys Lys Gln Glu Gln Pro  
 450 455

&lt;210&gt; 111

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (70)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (71)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (80)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 111

Lys Arg Arg Pro Thr Ala Thr Ser Ala Cys Arg Gly Gly Pro Ala Ala  
 1 5 10 15

Glu Arg Ser Cys Leu Arg Val Thr Phe Ala Ser Ala Cys Pro Ala Ser  
 20 25 30

Met Glu Pro Lys Arg Ile Arg Glu Gly Tyr Leu Val Lys Lys Gly Ser  
 35 40 45

Val Phe Asn Thr Trp Lys Pro Met Trp Val Val Leu Leu Glu Asp Gly  
 50 55 60

Ile Glu Phe Tyr Lys Xaa Xaa Ser Asp Asn Ser Pro Lys Gly Met Xaa  
 65 70 75 80

Pro Leu Lys Gly Ser Thr Leu  
 85

&lt;210&gt; 112

&lt;211&gt; 592

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (45)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (52)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (96)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

T00250" 6655660

<220>  
 <221> SITE  
 <222> (105)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (296)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (306)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (313)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (589)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (591)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 112  
 Gln Glu Cys Arg Gly Ile Arg Ala Ala Ser Ala Ser Ala Gln Glu Leu  
   1                  5                  10                  15  
 Ala Thr Ser Leu Lys Thr Glu Gly Thr Val Gly Gly Gly Thr Val Gly  
           20                  25                  30  
 Gln Cys Gly Thr Tyr Leu Ser Pro Leu Trp Arg Gly Xaa Thr Arg Glu  
           35                  40                  45  
 Arg Ala Pro Xaa Gly Thr Glu Met Gln Asp Arg Leu His Ile Leu Glu  
       50                  55                  60  
 Asp Leu Asn Met Leu Tyr Ile Arg Gln Met Ala Leu Ser Asp Leu Pro  
   65                  70                  75                  80  
 Glu Asp Thr Glu Leu Gln Arg Lys Leu Asp His Glu Ile Arg Met Xaa  
           85                  90                  95  
 Glu Gly Ala Cys Lys Leu Leu Ala Xaa Cys Ser Gln Arg Glu Gln Ala  
           100                  105                  110  
 Leu Glu Ala Thr Lys Ser Leu Leu Val Cys Asn Ser Arg Ile Leu Ser  
       115                  120                  125  
 Tyr Met Gly Glu Leu Gln Arg Arg Lys Glu Ala Gln Val Leu Gly Lys  
       130                  135                  140  
 Thr Ser Arg Arg Pro Ser Asp Ser Gly Pro Pro Ala Glu Arg Ser Pro  
   145                  150                  155                  160  
 Cys Arg Gly Arg Val Cys Ile Ser Asp Leu Arg Ile Pro Leu Met Trp  
           165                  170                  175  
 Lys Asp Thr Glu Tyr Phe Lys Asn Lys Gly Asp Leu His Arg Trp Ala  
       180                  185                  190

005599-092004

Val Phe Leu Leu Leu Gln Leu Gly Glu His Ile Gln Asp Thr Glu Met  
 195 200 205  
 Ile Leu Val Asp Arg Thr Leu Thr Asp Ile Ser Phe Gln Ser Asn Val  
 210 215 220  
 Leu Phe Ala Glu Ala Gly Pro Asp Phe Glu Leu Arg Leu Glu Leu Tyr  
 225 230 235 240  
 Gly Ala Cys Val Glu Glu Glu Gly Ala Leu Thr Gly Gly Pro Lys Arg  
 245 250 255  
 Leu Ala Thr Lys Leu Ser Ser Ser Leu Gly Arg Ser Ser Gly Arg Arg  
 260 265 270  
 Val Arg Ala Ser Leu Asp Ser Ala Gly Gly Ser Gly Ser Ser Pro Ile  
 275 280 285  
 Leu Leu Pro Thr Pro Val Val Xaa Gly Pro Arg Tyr His Leu Leu Ala  
 290 295 300  
 His Xaa Thr Leu Thr Leu Ala Ala Xaa Gln Asp Gly Phe Arg Thr His  
 305 310 315 320  
 Asp Leu Thr Leu Ala Ser His Glu Glu Asn Pro Ala Trp Leu Pro Leu  
 325 330 335  
 Tyr Gly Ser Val Cys Cys Arg Leu Ala Ala Gln Pro Leu Cys Met Thr  
 340 345 350  
 Gln Pro Thr Ala Ser Gly Thr Leu Arg Val Gln Gln Ala Gly Glu Met  
 355 360 365  
 Gln Asn Trp Ala Gln Val His Gly Val Leu Lys Gly Thr Asn Leu Phe  
 370 375 380  
 Cys Tyr Arg Gln Pro Glu Asp Ala Asp Thr Gly Glu Glu Pro Leu Leu  
 385 390 395 400  
 Thr Ile Ala Val Asn Lys Glu Thr Arg Val Arg Ala Gly Glu Leu Asp  
 405 410 415  
 Gln Ala Leu Gly Arg Pro Phe Thr Leu Ser Ile Ser Asn Gln Tyr Gly  
 420 425 430  
 Asp Asp Glu Val Thr His Thr Leu Gln Thr Glu Ser Arg Glu Ala Leu  
 435 440 445  
 Gln Ser Trp Met Glu Ala Leu Trp Gln Leu Phe Phe Asp Met Ser Gln  
 450 455 460  
 Trp Lys Gln Cys Cys Asp Glu Ile Met Lys Ile Glu Thr Pro Ala Pro  
 465 470 475 480  
 Arg Lys Pro Pro Gln Ala Leu Ala Lys Gln Gly Ser Leu Tyr His Glu  
 485 490 495  
 Met Ala Ile Glu Pro Leu Asp Asp Ile Ala Ala Val Thr Asp Ile Leu  
 500 505 510  
 Thr Gln Arg Arg Ala Gln Gly Trp Arg His Pro His Pro Gly Trp Gln  
 515 520 525  
 Cys Leu Gln Thr Ser Leu Pro Cys Leu Thr Pro Ala Arg Leu Pro Gln  
 530 535 540

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 100250" 666666



<220>  
<221> SITE  
<222> (80)

$\langle 220 \rangle$ 

<222> (86)

<400> 114

Xaa Ser Arg Thr Phe Tyr Leu Val Ala Lys Thr Glu Gln Glu Met Gln  
20 25 30

Val Trp Val His Ser Ile Ser Gln Val Cys Asn Leu Gly His Leu Glu  
35 40 45

Asp Gly Ala Asp Ser Met Glu Ser Leu Ser Tyr Thr Pro Ser Ser Leu  
50 55 60

Gln Pro Ser Ser Ala Ser Ser Leu Leu Thr Ala His Ala Ala Xaa Xaa  
65 70 75 80

Ser Leu Pro Arg Asp Xaa Pro Asn Thr Asn Ala Val Ala Thr Glu Glu  
85 90 95

Thr Arg Ser Glu Ser Glu Leu Leu Phe Leu Pro Asp Tyr Leu Val Leu  
100 105 110

Ser Asn Cys Glu Thr Gly Arg Leu His His Thr Ser Leu Pro Thr Arg  
115 120 125

Cys Asp Ser Trp Ser Asn Ser Asp Arg Ser Leu Glu Gln Ala Ser Phe  
130 135 140

Asp Asp Val Phe Val Asp Cys Leu Gln Pro Leu Pro Ser Ser His Leu  
145 150 155 160

Val His Pro Ser Cys His Gly Ser Gly Ala Gln Glu Val Pro Ser Ser  
165 170 175

Arg Pro Gln Ala Ala Leu Ile Trp Ser Arg Glu Ile Asn Gly Pro Pro  
180 185 190

Arg Gly Pro Leu Val Phe Phe Thr Ile Ala Gly Lys Phe Leu Lys Phe  
195 200 205

His His Ser Gly Arg  
210

<210> 115

<211> 153

<212> PRT

<213> Homo sapiens

<400> 115

Leu Thr Ser Gly Phe Leu Ser Gly Tyr Gly Ile Ser Val Trp Val Ile  
1 5 10 15

Ser Trp Gln Arg Gly Ala Gly Ser Met Gly Gly Lys Lys Gly Ala Gly  
20 25 30

Arg Gly Trp Leu Gln Gly Gly Gly Arg Val Arg Glu Ala Leu His Gly  
35 40 45

Ile	Cys	Thr	Ile	Leu	Gln	Val	Ala	Lys	Val	Ala	Asp	Leu	Thr	Asp	Ala
50						55				60					
Val	His	Pro	His	Leu	His	Phe	Leu	Leu	Ser	Phe	Gly	His	Gln	Val	Glu
65				70						75				80	
Cys	Thr	Gly	Ser	Ser	Leu	Asp	Asn	Glu	His	Glu	Ile	Ile	Leu	Lys	Phe
				85				90						95	
Leu	Pro	Asn	Lys	Ala	Gly	Ala	His	Met	Leu	Pro	His	Cys	Thr	Leu	Ala
		100						105				110			
Glu	Val	Tyr	His	Pro	Asp	Gly	Leu	Ala	Gly	Val	Leu	Val	Pro	Val	Val
		115				120						125			
Leu	Gln	Asp	Ile	Gly	Val	Ala	Ala	His	Ala	Ala	Ser	Pro	Glu	Asp	Lys
130						135				140					
Pro	Ala	Leu	Ala	Pro	Gly	Val	Ala	Leu							
145				150											

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<210> 116
<211> 321
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (271)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (285)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 116																
Val	Lys	Val	Arg	Leu	Ile	Glu	Asp	Arg	Val	Leu	Pro	Ser	Gln	Cys	Tyr	
1				5					10					15		
Gln	Pro	Leu	Met	Glu	Leu	Leu	Met	Glu	Ser	Val	Gln	Gly	Pro	Ala	Glu	
			20					25					30			
Glu	Asp	Thr	Ala	Ser	Pro	Leu	Ala	Leu	Leu	Glu	Glu	Leu	Thr	Leu	Gly	
		35					40					45				
Asp	Cys	Arg	Gln	Asp	Leu	Ala	Thr	Lys	Leu	Val	Lys	Leu	Phe	Leu	Gly	
	50					55					60					
Arg	Gly	Leu	Ala	Gly	Arg	Phe	Leu	Asp	Tyr	Leu	Thr	Arg	Arg	Glu	Val	
65					70					75					80	
Ala	Arg	Thr	Met	Asp	Pro	Asn	Thr	Leu	Phe	Arg	Ser	Asn	Ser	Leu	Ala	
				85					90					95		
Ser	Lys	Ser	Met	Glu	Gln	Phe	Met	Lys	Leu	Val	Gly	Met	Pro	Tyr	Leu	
			100					105					110			
His	Glu	Val	Leu	Lys	Pro	Val	Ile	Ser	Arg	Val	Phe	Glu	Glu	Lys	Lys	
		115					120					125				
Tyr	Met	Glu	Leu	Asp	Pro	Cys	Lys	Met	Asp	Leu	Gly	Pro	His	Pro	Glu	
	130					135					140					
Asp	Leu	Leu	Gln	Arg	Arg	Thr	Leu	Gly	Gly	Ala	Asp	Ala	Gly	Asp	Gln	

145                      150                      155                      160  
 Pro Gly Ala Ala Asp Gly Leu Leu Gly Pro Ile Val Asp Ala Ile Val  
                                  165                      170                      175  
 Gly Ser Val Gly Arg Cys Pro Pro Ala Met Arg Leu Ala Phe Lys Gln  
                                  180                      185                      190  
 Leu His Arg Arg Val Glu Glu Arg Phe Pro Gln Ala Glu His Gln Asp  
                                  195                      200                      205  
 Val Lys Tyr Leu Ala Ile Ser Gly Phe Leu Phe Leu Arg Phe Phe Ala  
                                  210                      215                      220  
 Pro Ala Ile Leu Thr Pro Lys Leu Phe Asp Leu Arg Asp Gln His Ala  
                                  225                      230                      235                      240  
 Asp Pro Gln Thr Ser Arg Ser Leu Leu Leu Leu Ala Lys Met Cys His  
                                  245                      250                      255  
 Ser Ile Pro Val Ser His Ile Arg Ala Val Glu Arg Val Asp Xaa Gly  
                                  260                      265                      270  
 Ala Phe Gln Leu Pro His Val Met Gln Val Val Thr Xaa Asp Gly Thr  
                                  275                      280                      285  
 Gly Ala Leu His Thr Thr Tyr Leu Gln Cys Lys Asn Val Asn Glu Leu  
                                  290                      295                      300  
 Asn Gln Trp Leu Ser Ala Leu Arg Lys Ala Ser Ala Pro Asn Pro Asn  
                                  305                      310                      315                      320  
 Leu

<210> 117  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 117  
 Met Ser Ala Gly Asp Ala Val Cys Thr Gly Trp Leu Val Lys Ser Pro  
   1                                 5                                 10                                 15  
 Pro Glu Arg Lys Leu Gln Arg Tyr Ala Trp Arg Lys Arg Trp Phe Val  
                                  20                                 25                                 30  
 Leu Arg Arg Gly Arg Met Ser Gly Asn Pro Asp Val Leu Glu Tyr Tyr  
                                  35                                 40                                 45  
 Arg Asn Lys His Ser Ser Lys Pro Ile Arg Val Ile Asp Leu Ser Glu  
                                  50                                 55                                 60  
 Cys Ala Val Trp Lys His Val Gly Pro Ser Phe Val Arg Lys Glu Phe  
                                  65                                 70                                 75                                 80  
 Gln Asn Asn Phe Val Phe Ile Val Lys Thr Thr Ser Arg Thr Phe Tyr  
                                  85                                 90                                 95  
 Leu Val Ala Lys Thr Glu Gln Glu Met Gln Val Trp Val His Ser Ile  
                                  100                                 105                                 110  
 Ser Gln Val Cys Asn  
                                  115

<210> 118  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 118  
 Ser Asn Thr Pro Pro Pro Arg Pro Pro Lys Pro Ser His Leu Ser  
     1                    5                    10                    15

<210> 119  
 <211> 13  
 <212> PRT  
 <213> Homo sapiens

<400> 119  
 Pro Cys Arg Phe Ser Pro Met Tyr Pro Thr Ala Ser Ala  
     1                    5                    10

<210> 120  
 <211> 13  
 <212> PRT  
 <213> Homo sapiens

<400> 120  
 Ser Tyr Val Pro Met Ser Pro Gln Ala Gly Ala Ser Gly  
     1                    5                    10

<210> 121  
 <211> 13  
 <212> PRT  
 <213> Homo sapiens

<400> 121  
 Ser Ile Ser Ser Pro Leu Pro Glu Leu Pro Ala Asn Leu  
     1                    5                    10

<210> 122  
 <211> 14  
 <212> PRT  
 <213> Homo sapiens

<400> 122  
 Lys Phe Ser Leu Asp Tyr Leu Ala Leu Asp Phe Asn Ser Ala  
     1                    5                    10

<210> 123  
 <211> 12  
 <212> PRT  
 <213> Homo sapiens

<400> 123  
 Arg Val Asp Tyr Val Gln Val Asp Glu Gln Lys Thr  
     1                    5                    10

<210> 124  
 <211> 12  
 <212> PRT  
 <213> Homo sapiens

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<400> 124  
 Ser Pro Asp Asp Tyr Ile Pro Met Asn Ser Gly Ser  
 1 5 10

<210> 125  
 <211> 11  
 <212> PRT  
 <213> Homo sapiens

<400> 125  
 Ser Tyr Ile Glu Met Glu Glu His Arg Thr Ala  
 1 5 10

<210> 126  
 <211> 30  
 <212> DNA  
 <213> Homo sapiens

<400> 126  
 acgtggatcc ccgagagtct ctctcacatg 30

<210> 127  
 <211> 34  
 <212> DNA  
 <213> Homo sapiens

<400> 127  
 atatatatat ctcgaggggt gaagctgtgg gata 34

<210> 128  
 <211> 20  
 <212> DNA  
 <213> Homo sapiens

<400> 128  
 cccatcacca tcttccagga 20

<210> 129  
 <211> 20  
 <212> DNA  
 <213> Homo sapiens

<400> 129  
 ggggccatcc acagtcttct 20

<210> 130  
 <211> 24  
 <212> DNA  
 <213> Homo sapiens

<400> 130  
 gccaggatga gcactggtga cact 24

<210> 131

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<211> 25  
 <212> DNA  
 <213> Homo sapiens

<400> 131  
 cactttggat tgcctctcat cagtc 25

<210> 132  
 <211> 33  
 <212> DNA  
 <213> Homo sapiens

<400> 132  
 acgtggatcc ccaatagaga aatcaatggc cca 33

<210> 133  
 <211> 30  
 <212> DNA  
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<400> 133  
 acgtggatcc cctgggttaga gatgtgtggtt 30

<210> 134  
 <211> 33  
 <212> DNA  
 <213> Homo sapiens

<400> 134  
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<210> 135  
 <211> 32  
 <212> DNA  
 <213> Homo sapiens

<400> 135  
 tgtgtgaatt cgggtggaaag gtttctcgag tc 32

<210> 136  
 <211> 27  
 <212> DNA  
 <213> Homo sapiens

<400> 136  
 gcggcaagct ttttgcaaag cctaggc 27

<210> 137  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 137  
 Met Ser Ala Gly Asp Ala Val Cys Thr Gly Trp Leu Val Lys Ser Pro

1 5 10 15

Pro Glu Arg Lys<sub>20</sub> Leu Gln Arg Tyr Ala<sub>25</sub> Trp Arg Lys Arg Trp<sub>30</sub> Phe Val

Leu Arg Arg<sub>35</sub> Gly Arg Met Ser Gly<sub>40</sub> Asn Pro Asp Val Leu<sub>45</sub> Glu Tyr Tyr

Arg Asn Lys His Ser Ser Lys<sub>55</sub> Pro Ile Arg Val Ile<sub>60</sub> Asp Leu Ser Glu

Cys Ala Val Trp Lys His<sub>70</sub> Val Gly Pro Ser Phe<sub>75</sub> Val Arg Lys Glu Phe<sub>80</sub>

Gln Asn Asn Phe Val<sub>85</sub> Phe Ile Val Lys Thr<sub>90</sub> Thr Ser Arg Thr Phe<sub>95</sub> Tyr

Leu Val Ala Lys<sub>100</sub> Thr Glu Gln Glu Met<sub>105</sub> Gln Val Trp Val His<sub>110</sub> Ser Ile

Ser Gln Val Cys Asn Leu Gly His<sub>120</sub> Leu Glu Asp Gly Ala<sub>125</sub> Asp Ser Met

Glu Ser Leu Ser<sub>130</sub>

<210> 138  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 138  
 Ser Pro Leu Pro Glu<sub>5</sub> Leu Pro Ala Asn Leu Glu Pro Pro Pro Val<sub>15</sub> Asn<sub>1</sub>

Arg Asp Leu Lys<sub>20</sub> Pro Gln Arg Lys Ser<sub>25</sub> Arg Pro Pro Pro Leu Asp<sub>30</sub>

<210> 139  
 <211> 62  
 <212> PRT  
 <213> Homo sapiens

<400> 139  
 Trp Thr Lys Lys Phe<sub>5</sub> Ser Leu Asp Tyr Leu Ala Leu Asp Phe Asn Ser<sub>15</sub>  
 Ala Ser Pro Ala<sub>20</sub> Pro Met Gln Gln Lys<sub>25</sub> Leu Leu Leu Ser Glu Glu Gln<sub>30</sub>

Arg Val Asp Tyr Val Gln Val Asp<sub>40</sub> Glu Gln Lys Thr Gln Ala Leu Gln<sub>45</sub>  
 Ser Thr Lys Gln Glu Trp Thr Asp Glu Arg Gln Ser Lys Val<sub>50</sub>  
 55 60

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